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Using Survey Questions to Measure Preferences: Lessons from an Experimental Validation in Kenya

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Abstract

Can a short survey instrument reliably measure a range of fundamental economic preferences across diverse settings? We focus on survey questions that systematically predict behavior in incentivized experimental tasks among German university students (Becker et al. 2016) and were implemented among representative samples across the globe (Falk et al. 2018). This paper presents results of an experimental validation conducted among low-income individuals in Nairobi, Kenya. We find that *quantitative* survey measures -- hypothetical versions of experimental tasks -- of time preference, attitude to risk and altruism are good predictors of choices in incentivized experiments, suggesting these measures are broadly experimentally valid. At the same time, we find that *qualitative* questions -- self-assessments -- do not correlate with the experimental measures of preferences in the Kenyan sample. Thus, caution is needed before treating self-assessments as proxies of preferences in new contexts.

Keywords: preference measurement; experiment; survey; validation

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Introduction

Fundamental preferences in the economic domain, such as time discounting and risk preferences, and in the social domain, such as altruism, reciprocity and spitefulness, constitute key elements of individual decision-making. Figuring out ways to accurately measure these preferences among large samples in the field holds considerable promise since doing so may shed light on the sources of vast differences in preferences observed across individuals and societies, and their role in fundamental economic choices and societal trajectories. While measuring preferences using incentivized tasks is generally considered the gold standard,¹ implementing incentivized tasks among large samples outside of the controlled environment of an experimental laboratory is often infeasible, given that they are relatively expensive and time consuming. Consequently, a potentially attractive alternative is to employ survey questions instead of incentivized experiments, but there has long been widespread concern that non-incentivized self-reported survey measures of preferences may not reliably capture real life choices.

To tackle this important methodological trade-off, Falk et al. (2018) have recently developed an innovative short (7-8 minutes) survey module, designed to measure a wide range of economic preferences. It has been implemented among representative samples of subjects in more than seventy countries (Falk et al., 2018), creating the most comprehensive global data set with comparable measures of preferences, namely, the Global Preference Survey (GPS). Measures of preferences in each domain are constructed as a weighted average based on one objective quantitative item -- a hypothetical version of an experimental task -- and one subjective qualitative item that measures self-reported willingness to act in a certain way.

To establish the validity of the survey preference measures, Becker et al. (2016) perform a careful experimental validation of the survey questions, and document that survey measures of preferences do predict choices in incentivized decisions. The validation was conducted among students at the University of Bonn, Germany. Given the wide coverage of the existing GPS data set and the convenience of the survey module in terms of implementation,² it has the potential to become a widely adopted instrument for (i) studying differences in preferences across societies and their relationships with economic outcomes, (ii) employing preference measures as control variables when identifying causal effects of other factors

¹ Experimental measures of preferences have been shown to predict a wide range of real-life behavior (e.g., Ashraf, Karlan, & Yin, 2006; Burks, Carpenter, Goette, & Rustichini, 2009; Meier & Sprenger, 2010; Rustagi, Engel, & Kosfeld, 2010; Sutter, Kocher, Glätzle-Rützler, & Trautmann, 2013).

² There is a laudable public good element in the GPS project. The global data set, as well as the survey instrument -- and its 116 versions for 70 countries and 78 different languages -- are readily available to researchers at <https://www.briq-institute.org/global-preferences/home>. Our validation experiment benefited greatly from this transparency, as we build on the Swahili translation of the survey module for Kenya.

correlated with preferences, and (iii) as outcome variables in new randomized controlled trials aiming to uncover the effects of various interventions on individual preferences.³

This paper adds to these efforts and aims to be useful in three ways. First, we test the experimental validity of the survey questions outside of a sample of university students from a rich country, by focusing on a sample from the other end of the global distribution of income and education. Our experimental subjects are residents of working class neighborhoods (sometimes referred to as “slums”) in Nairobi, Kenya, a setting with a different set of institutions and economic constraints. The participants are aged between 20-46, with average income of around USD 3 per day, and 54% are unemployed. Establishing the experimental validity of the measures among this subject pool is important for several reasons. Most of humanity lives in low and middle income countries, outside of Western, Educated, Industrialized, Rich and Democratic societies (Henrich et al. 2010), in which the original GPS validation was conducted. Next the GPS module is particularly suitable to be integrated into large-scale follow-up surveys in randomized control trials, which are routinely implemented by development economists (Banerjee and Duflo 2012), often in Africa, and thus knowledge of whether the survey preference measures predict incentivized behavior among low-income individuals in Kenya is a useful input for scholars considering the adoption of these measures.⁴

Second, comparing the results of analogous validations conducted in Germany and Kenya is methodologically interesting, because measures of economic preferences in GPS are derived from both objective quantitative tasks as well as subjective qualitative questions, based on self-assessments.^{5,6} There is a legitimate concern that subjective self-assessments might be understood and interpreted in different ways across countries, which can attenuate their ability to uncover personality traits and complicate cross-country comparisons. For example, the Big Five measures of personality traits, the most widely-used

³ To date, the GPS measures have been used to explore global variations of preferences and their relationships with country-level and individual-level characteristics (Falk et al., 2018), deep historical origins of variation of preferences (Becker, Enke, and Falk 2018) and the relationships between economic development and gender differences in preferences (Falk & Hermle, 2018).

⁴ Indeed, this experimental validation itself took place as a part of a larger project that aims to estimate the long-term effects on individual preferences of a randomized public health intervention (a school-based deworming program) which took place in Western Kenya starting in the late 1990s (Baird et al. 2016; Miguel and Kremer 2004). We used lessons from the current validation exercise in the design of a preference survey module that is integrated into the most recent round of follow-up data collection (Kenyan Life Panel Survey, KLPS, round 4).

⁵ An example of a qualitative question from GPS would be “Please tell me, in general, how willing or unwilling you are to take risks, using a scale from 0 to 10”, or “How willing are you to give to a charity without expecting anything in return?”

⁶ For recent discussions about the importance of replications and other methods that aim to foster credibility of research findings see, for example, Maniadis, Tufano, and List (2014) and Christensen and Miguel (2018).

method to measure and classify personality traits in psychology, are based on self-assessments, and recent attempts to validate the Big Five measures have failed to reliably predict the intended personality traits in low- or middle-income countries, in contrast to samples from the wealthy countries for which they were originally developed (Laajaj et al. 2019; Gurven et al. 2013). An advantage of GPS is that, besides self-assessments, it also contains quantitative questions that are arguably less subject to this issue, because they directly define the parameters and nature of the decision and more closely mirror the incentivized experimental task. Thus, we can test whether quantitative questions are relatively more robust predictors of actual incentivized behavior across two diverse settings, as compared to qualitative self-assessments.

Third, we place additional emphasis on the types of preferences that are likely to be especially important in settings with low social capital and a history of inter-group conflict, issues that are particularly pressing in low-income countries (Blattman and Miguel 2010). While pro-social preferences, such as altruism and positive reciprocity, help to establish and maintain cooperative and fair group outcomes even in situations with limited scope for reputation-building (Bowles 2006; Fehr and Fischbacher 2003), anti-social preferences (such as spitefulness and aggressive competitiveness) can contribute to the deterioration of co-operation (Falk, Fehr, & Fischbacher, 2005; Herrmann, Thoni, & Gächter, 2008).⁷ Furthermore, ethnic biases in social preferences -- in-group favoritism and out-group hostility -- create fertile ground for violent inter-group conflict. While the GPS focuses on measuring preferences relevant for explaining positive aspects of human social behavior, such as generalized altruism and reciprocity, we also assess the experimental validity of survey questions designed to measure the dark side of human social behavior. Specifically, we test the validity of questions designed to uncover anti-social preferences, such as spite, and distinguish between generalized, in-group, and out-group preferences, along both prosocial and anti-social dimensions.

Experimental design

The sample in our study are 123 subjects from the Kibera neighborhood in Nairobi, Kenya. The participants come from a low-income environment, are between 20 and 46 years of age, more than half are unemployed, half are women and, on average, they have two children (Table A1). The experiments were implemented

⁷ Anti-social preferences – malevolent willingness to harm others at a cost to self – have been shown to be relatively widespread in numerous settings in both high and low income settings (Abbink and Sadrieh 2009; Fehr, Hoff, and Kshetramade 2008; Herrmann, Thoni, and Gächter 2008; Prediger, Volland, and Herrmann 2014; Bauer, Cahliková, Chytilová, et al. 2018; Bauer, Cahliková, Celik-Katreniak, et al. 2018).

in a state-of-the-art experimental economics laboratory in the Busara Center for Behavioral Economics (Haushofer et al. 2014).

Subjects were invited to the lab twice, for visits one week apart, where the time gap was introduced in order to minimize spillovers between the survey and experimental measures. During one visit, they made choices in a set of incentivized experiments, while during the other, they answered non-incentivized survey questions. The order of experiments/survey was randomized on an individual level. We elicited measures of the following types of preferences: (i) time discounting, (ii) risk preference, (iii) ambiguity aversion, (iv) altruism (generalized, in-group, and out-group), (v) anti-social behavior (generalized, in-group, and out-group), and (vi) positive reciprocity.

The experimental choices involved high stakes, in order to capture decision situations with substantial financial consequences for the subjects. Specifically, each subject received a show-up fee (KSh 450 for the survey part and KSh 250 for the experimental part, where 100 KSh was roughly equal to 1 USD during the study period) and a payoff determined by one randomly selected choice made in the experimental part. The average payoff from experiments was KSh 820, i.e., the equivalent of approximately 2.5 days' typical earnings. Each type of preference was elicited using one experimental task. The full experimental protocol is available in the Online Appendix.

For time discounting, subjects made 25 binary choices between an immediate payment or a larger payment with a three-month delay, which was increased by a fixed amount in each subsequent binary choice, using a multiple price list. Similarly, when eliciting risk preference, subjects made 21 binary choices between a lottery that yielded a positive amount or zero with equal probability, and a safe payment option that increased in each subsequent binary choice. Ambiguity aversion was measured by a binary choice between two bags -- one with a known and one with an unknown composition of differently colored balls -- with the payoff determined by drawing a ball of a specific color.

In the experiments focusing on the social domain, altruism was measured by the choice of how much of an endowment the participant decided to donate to a charity. One choice measured donations to a charity which helps people in Kenya (generalized altruism), the second choice elicited donations to a charity which helps people from the participant's ancestral home area (in-group altruism), and the third elicited donations to a charity which helps people in Kenya outside of the subject's own ancestral home area (out-group altruism). Anti-social behavior was measured using a binary choice in which subjects could decide to reduce the payoff of another person by sacrificing a part of their own payoff. Again, we implemented three versions, using the same wording as above to indicate generalized, in-group, and out-group versions of the task. Finally, positive reciprocity was measured by the amount of money given to a person who had

been kind to the participant. This person was an anonymous participant in a different, earlier experiment in the lab who decided to leave a gift (a bag of sugar, which is a popular gift item in the setting we study) for a future visitor of the lab (i.e., decision-maker of our study), instead of keeping all the sugar for him or herself. As an alternative measure of reciprocity, we used the difference in the amount donated to this (kind) person and to another (unkind) person who had decided not to give any sugar.

In the survey part, we elicited one objective quantitative measure and one or two subjective qualitative measures for each type of preference.⁸ The quantitative questions presented a hypothetical scenario that mimicked the experimental task. For time and risk preferences, instead of asking the full set of questions as in the experiment, we used the “staircase” or “unfolding brackets” procedure, in which each participant answers a sub-set of five binary choices chosen based on their answer to the previous question. The qualitative questions measure self-reported willingness to act in a certain way on a 0-10 scale. Specifically, respondents rate their own willingness to give up something that is beneficial today in order to benefit more in the future (time discounting), to take risks (risk preference), to give to a charity and to share with others (altruism), to cause trouble for other people and to do harm to other people (anti-social preferences), and to return a favor (reciprocity).

Note that the experimental validation in Nairobi is comparable to, but not strictly identical to, the preference measure validation conducted in Bonn (Becker et al. 2016). Some of the experimental tasks had to be simplified, reflecting the differences in average schooling between the Kenyan and German subject pools. We also slightly adjusted the wording in some of the GPS survey questions, based on feedback from piloting and focus-group discussions, in order to improve comprehension in the Kenyan context. In terms of procedure and data analysis, we use a similar approach as Becker et al. (2016). Please see the Online Appendix for details of each experimental task, questions used and the comparison of the Kenyan and German validation exercises.

To start, we observe that the elicited preference measures have several desirable properties (see Online Appendix Table A1 for summary statistics). First, there is substantial variation in all our measures of preferences, both survey and experimental, alleviating concerns that a failure to identify relationships between variables of interest could be mechanically driven by a lack of variation. Second, behavior in the experiments is largely comparable to previous studies. For example, in the generalized version of the dictator game (altruism measure), we observe that subjects allocate around 20% of their endowment to charity. We also find that subjects are significantly more willing to give to a charity that helps their own ethnic group, as compared to a charity that helps out-group members. Similarly, slightly fewer than 20%

⁸ The only exception is ambiguity aversion, for which there is only one quantitative survey measure.

reduce another person's income at a cost to themselves, which is comparable to the prevalence of anti-social behavior in other settings (Abbink and Sadrieh 2009; Prediger, Vollan, and Herrman 2014), and subjects are significantly more destructive towards out-group members.

Results

We begin by describing the predictive power of objective quantitative survey measures. For each survey item, Table 1 displays an OLS coefficient from a regression of the standardized experimental measure on the standardized survey item (column 1) and the Spearman correlation between the survey item and a respective experimental incentivized preference measure (column 2). Below each coefficient and correlation, we report the 95% confidence interval.

We find that the quantitative survey measures of time preference, attitude to risk, generalized altruism, altruism towards one's own ethnic group, and altruism towards out-group members are strongly positively correlated with experimental measures, and the observed relationships are statistically significant. The quantitative survey measure of ambiguity aversion and all three measures of anti-social behavior correlate weakly with the experimental measure: the correlations for all are relatively small in magnitude and none is significant at traditional levels.

Specifically, in terms of magnitudes, the correlations are 0.40 for time discounting, 0.25 for risk preference, 0.29 for positive reciprocity, 0.41 for generalized altruism, 0.36 for in-group altruism and 0.38 for out-group altruism. These correlations are slightly lower than, though comparable to the correlations generated in the validation of the same set of survey preference measures in Germany (Becker et al. 2016), reported for comparison in column 3, in which the corresponding correlations were found to be 0.55 (time discounting), 0.34 (risk taking), 0.35 (positive reciprocity) and 0.39 (generalized altruism). Each of the correlations from the German study reported in Table 1 falls within the respective 95% confidence interval of our estimate in Kenya, except of the measure of time discounting for which the correlation in Germany is 0.55 and the upper bound of our estimate is 0.54. We speculate that the somewhat smaller correlations in Kenya may potentially reflect greater measurement error in the elicitation of preferences among a subject pool with lower average schooling levels.

The observed patterns are robust to controlling for the level of understanding, based on direct cross-check questions, and violations of monotonicity (in tasks eliciting time and risk preferences, which use multiple price lists), an indirect proxy of understanding. The correlations are also similar for different orderings of the survey and experimental tasks (namely, whether they were elicited during the first or

second week), and robust to controlling for a set of basic individual characteristics (i.e., age, gender, being unemployed, and the number of children); the results of these robustness checks are presented in Online Appendix Table A2.

Further, we consider a concern that is inherent in this type of experimental validation, namely, that subjects may remember their choices from the previous week and choose the same options in the second week in order to appear consistent over time. To address this, we included an independent task to measure a subject's memory. Specifically, in the first week, the participants were shown a set of ten letters on a screen for twenty seconds and were incentivized to remember those letters for a short period. In the second week, they were asked to recall these ten letters, again in an incentive-compatible way. We show that the correlations observed between experimental and survey measures of preferences are not driven by subjects with more accurate recall (those remembering above the median number of letters), with the exception of the time preference measure (Table A3).

Next, we explore the predictive power of the subjective survey self-assessments. In contrast to the objective survey measures, qualitative survey measures are rather poor predictors of the experimental measures of preferences (Table 2). None of the correlations reaches statistical significance at conventional levels when we use the Spearman correlation (column 2). The magnitudes are also small. The estimated coefficients are close to zero and in many cases do not have the expected sign: nine estimated correlations have expected signs, while seven have an opposite sign to that predicted. None of the estimated 16 correlations is larger than 0.15. Specifically, the correlations are 0.06 for time discounting, -0.02 for risk preference, 0.06 and 0.14 for two measures of positive reciprocity, 0.07 for generalized altruism, -0.02 for in-group altruism and -0.09 for out-group altruism. For comparison, the German validation (Becker et al. 2016) found the correlations to be -0.41 (time discounting)⁹, 0.35 (risk taking), 0.30 (positive reciprocity), and 0.23 and 0.38 (two measures of generalized altruism). We also find low predictive power of qualitative survey measures when using OLS regressions (column 1), with the exception of measures of positive reciprocity and out-group altruism, for which we find positive coefficients (0.21 and 0.18, respectively), significant at the 5% level.

Thus, the overall pattern differs from the patterns observed in the German validation exercise, where quantitative survey measures as well as subjective self-assessments reliably predict behavior in experimental tasks (column 3 of Tables 1 and 2): all estimated correlations in that study are statistical significant, have the expected sign, and the magnitude is on average 0.41 for quantitative and 0.33 for

⁹ Note that the negative sign is in line with the intuition since for the experimental measure and the quantitative survey measure of time discounting higher values indicate less patience, while higher values for the qualitative survey measure indicate more patience.

qualitative survey measures, ranging between 0.23 and 0.55. While we find comparable and statistically significant correlations for the quantitative measures, for the qualitative self-assessments the correlations in Kenya are on average approximately one fifth the magnitude of those reported in the German study.

Since our sample size is smaller than the German validation (123 vs. 409), we next address a concern that the difference in findings about the lower predictive power of qualitative items is due to a lack of statistical power. First, we performed power analysis for OLS coefficients. Note that the minimum detectable effect is the same for all our measures because they are standardized. With our sample size we are powered to detect coefficient of the magnitude 0.25 and larger, for $\alpha=0.05$ and $\beta=0.80$. Thus, we are powered to detect medium-sized (but not small) correlations. We perceive this as a meaningful size, given that we are interested in correlations between different (experimental and survey) measures designed to uncover the same underlying preferences. Also note that the lack of statistical significance of the relationship between the qualitative measures with experimental measures is primarily due to small magnitude point estimates, rather than due to large standard errors, as discussed above. Second, the confidence intervals are sufficiently narrow to document that estimated correlations in Kenya are smaller than those in the German study. Specifically, in Table 2 we show that the point estimate of each of the correlations for qualitative survey items from the German study is outside of the respective 95% confidence interval of our estimate in Kenya, except of one of our two measures of positive reciprocity, for which the correlation in Germany is 0.30 and the upper bound of our estimate is 0.31. Finally, it is also noteworthy that adding the qualitative survey measures into the regression that correlates a quantitative survey measure with the corresponding experimental choice adds little explanatory power, as indicated by a comparison of R-squared values in Table A5. Based on these patterns, we believe it is unlikely that the lack of statistically significant relationships between qualitative survey items and behavior in experiments in Kenya is due to the somewhat smaller sample size.

Below, we discuss potential explanations for why our findings about the low predictive power of qualitative questions are different from Becker et al. (2016). First, we consider differences in experimental design. Stakes are different in the Kenyan validation as compared to the German validation and a natural concern might be that survey responses only predict decisions with relatively low stakes.¹⁰ The observation that it is not the case that survey questions *per se* would fail to predict incentivized behavior in the Kenyan

¹⁰ In the validation in Nairobi, the average payoff from the experiments was 820 Kenyan shillings (approximately USD 8.2 at the time of the experiment), which is an equivalent of approximately 2.5 day's typical earnings in the area of the study. For comparison, in Bonn, the average experimental payoff was 54 Euro (approximately USD 83 at the time of the experiment), but it is not straightforward to assess how this amount compares to typical earnings since the subject pool are university students.

setting, but rather that a particular type of survey questions (self-assessments) do not predict behavior in that setting, does not favor this interpretation.

Although some of our experimental measures, in particular those for altruism and risk aversion, are closely comparable to Becker et al. (2016), elicitation of preferences in other domains differs in non-negligible ways. This was motivated by our effort to increase simplicity and variation in experimental choices. For example, we elicit reciprocity by measuring the allocation to a person who was kind to the participant, by giving a gift, instead of eliciting second-mover behavior in the Trust game that requires participant knowledge of multiplication. Also, in the time discounting task we elicit three-month discount rates, while Becker et al. (2016) elicit annual discount rates. Our design decision was informed by a small pilot, in which virtually all subjects opted for the most impatient option. Since a lack of variation in the experimental measure would mechanically lead to a low correlation with the survey measures, we decided to increase variation in choices by shortening the length of the delay of the future payment from one year to three months. We find it reassuring that the main pattern (a strong correlation with quantitative survey measures and a lack of correlation with the qualitative survey measure) holds both for the preference domains for which we use closely comparable measures, as well as for measures in preference domains that differ more from the original validation.

Next, the subject pool and setting is very different, including their education levels. While in Bonn study, all subjects are university students, around 30% of subjects in the Kenyan sample never attended secondary school. This is potentially especially important for self-assessments because the questions are relatively abstract, as compared to hypothetical versions of the experimental decisions. Since the subsample of subjects who have attended a university or a college is relatively small, we opt to separately estimate the correlations for subjects with below- vs. above-median years of schooling. We find no improvement in the predictive power of the qualitative survey items among subjects who have above-median schooling levels (Table A4).

Also, a long standing concern about using self-assessments to measure personality characteristics across cultures is that they might be understood and interpreted in different ways across settings with different languages and populations with different real life experiences. Finally, low experimental validity of personal self-assessments could, in principle, originate in social desirability biases. Certain personality traits, such as ability to delay consumptions, accept risk or willingness to share might be perceived as socially desirable and may introduce systematic biases in responses. Arguably, general personal self-assessments are more prone to such biases, as compared to specific choices with well-defined parameters and it might be the case that a tendency to misreport according to what subjects perceive as socially desirable differs across setting.

Overall, with just two validation studies at hand it is difficult to pin down one single factor that explains the differences in experimental validity of self-assessments in the German and Kenyan contexts. Thus, our paper highlights the need for more validation studies in additional setting to make progress on these open questions.

Concluding remarks

An experimental validation of survey preference measures among residents of a working class Nairobi neighborhood reveals several noteworthy patterns. First, we show that *quantitative survey measures* of time preference, attitude to risk and altruism are good predictors of choices in incentivized experiments. This finding reinforces the findings from a similar validation exercise performed among university students in Bonn (Becker et al. 2016), and thus, together, the two studies document the experimental validity of these measures at opposite ends of the global income and education distribution. Second, this study tested the experimental validity of survey preference measures in a new domain, *anti-social preferences*, which is arguably most prone to social desirability biases. We document that survey measures of anti-social preferences only weakly predict incentivized behavior, which strengthens the case for investing resources into gathering incentivized measures in this domain. Third, we find that the *subjective qualitative questions* on preferences do not meaningfully correlate with the experimental measures in the Kenyan sample, in contrast to the German sample. Thus, caution is needed before interpreting these measures as proxies of preferences in all contexts.

What lessons about measuring preferences using survey questions can we draw from the available evidence? First, our results should boost confidence in the ability of *objective quantitative* GPS survey measures of preferences, based on hypothetical tasks, to predict high-stakes incentivized behavior in experiments designed to measure a range of preferences across economically and culturally diverse settings. Second, qualitative survey questions have been shown to do a good job of predicting behavior in incentivized experiments in rich (mostly German) settings (Dohmen et al. 2011; Becker et al. 2016) and a range of real-life behaviors (Barasinska, Schaefer, and Stephan 2012; Bauernschuster et al. 2014; Bonin et al. 2007; Fouarge, Kriechel, and Dohmen 2014; Jaeger et al. 2010; Dohmen et al. 2011).¹¹ In light of our

¹¹ In contrast to rich country settings, validation studies conducted in low income countries are still rare and typically focus on measures of a single preference type, specifically on risk preference. Following up on Dohmen et al. (2011), who conducted a validation experiment in Germany, positive correlations between survey and experimental measures of risk preference were documented in rural Thailand (Hardeweg, Menkhoff, & Waibel 2013) and among Chinese students (Ding, Hartog, and Sun 2010). A recent cross-cultural study on risk-taking from 30 countries (Vieider et al. 2015) documents that qualitative survey measures are positively correlated with choices in incentivized experiments

findings it might be tempting to conjecture that self-assessments are generally unreliable in low-income settings, in contrast to high-income settings. However, since we do not know which factor (participant education levels, exposure to abstract concepts, social desirability biases, culturally-specific ways of interpreting self-assessments, etc.), or which combination of factors, explains the lower experimental validity of self-assessments in the Kenyan context, generalizing from a single study to all low-income environments would still be premature. Rather, our paper highlights the need for more validation studies, ideally a series of comparable validation exercises in a diverse set of contexts across the globe, in order to better understand the characteristics of individuals or societies for which the qualitative self-assessments are informative. Future research may also need to determine whether alternative formulations of qualitative questions can be more robust predictors of preferences than current self-assessments.

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in a majority of cases, but the magnitude and statistical significance of the correlation varies substantively across countries, which also suggests that the experimental validity of qualitative survey measures may be context specific.

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Table 1: Correlations between quantitative survey measures and experimental measures

Preference	Quantitative survey item	Kenya: Kibera residents		Germany: Bonn students		
		OLS Coefficient	Correlation	Correlation	Measures	
		(1)	(2)	(3)	(4)	
Time	Staircase measure: 5 interdependent choices between an early and delayed amount of money	0.33*** [0.16; 0.50]	0.40*** [0.24; 0.54]	0.55***	comparable	
Risk	Staircase measure: 5 interdependent choices between a lottery and varying safe options	0.21** [0.03; 0.38]	0.25*** [0.07; 0.41]	0.34***	comparable	
Ambiguity aversion	Hypothetical choice between a bag with known and unknown number of balls of different color	0.13 [-0.05; 0.31]	0.13 [-0.05; 0.30]	n.a.		
Reciprocity	Hypothetical choice of the amount of a gift given to a stranger who provided help	0.12 [-0.06; 0.30]	0.29*** [0.12; 0.45]	0.35***	exp. different; survey	
Reciprocity (diff)	Hypothetical choice of the amount of a gift given to a stranger who provided help	0.06 [-0.12; 0.24]	0.19** [0.02; 0.36]	n.a.	comparable	
Altruism	generalized	Hypothetical choice of the amount donated to a charity (out of Ksh3200)	0.41*** [0.25; 0.58]	0.41*** [0.26; 0.55]	0.39***	comparable
	in-group	Hypothetical choice of the amount donated to a charity that helps people in ancestral home area (out of Ksh3200)	0.33*** [0.16; 0.50]	0.36*** [0.20; 0.51]	n.a.	
	out-group	Hypothetical choice of the amount donated to a charity that helps people in other parts of Kenya than ancestral home area (out of Ksh3200)	0.40*** [0.23; 0.56]	0.38*** [0.22; 0.52]	n.a.	
Anti-social behavior	generalized	Hypothetical decision between (3200, 3200) or (3150, 1600) for self and for another person	0.05 [-0.13; 0.23]	0.05 [-0.13; 0.22]	n.a.	
	in-group	Hypothetical decision between (3200, 3200) or (3150, 1600) for self and for a person from ancestral home area	0.07 [-0.12; 0.26]	0.07 [-0.11; 0.25]	n.a.	
	out-group	Hypothetical decision between (3200, 3200) or (3150, 1600) for self and for a person from other parts of Kenya than ancestral home area	0.14 [-0.04; 0.32]	0.14 [-0.04; 0.31]	n.a.	

Notes: Column 1 is an OLS coefficient from a regression of the standardized experimental measure on the standardized survey item. Column 2 displays Spearman correlations between the survey item and the respective experimental measure (one for each preference type, except for reciprocity, where we use two experimental measures). ***, **, and * denote significance at the 1-, 5-, and 10-percent level, respectively. Below each OLS coefficient and Spearman correlation, the table reports 95% confidence interval in the square brackets. Column 3 displays the correlation between experimental and quantitative survey measures from the validation study of Becker et al. (2016) among university students in Germany. Column 4 indicates to what extent measures from our study in Kenya and measures from the German study are comparable.

Table 2: Correlations between qualitative survey measures and experimental measures

Preference	Qualitative survey item	Kenya: Kibera residents		Germany: Bonn students		
		OLS Coefficient (2)	Correlation (1)	Correlation (3)	Measures (4)	
Time	Willingness to give up something that is beneficial today in order to benefit more in the future	0.04 [-0.14; 0.22]	0.06 [-0.12; 0.23]	-0.41***	comparable	
Risk	Willingness to take risks	0.01 [-0.17; 0.19]	-0.02 [-0.20; 0.16]	0.35***	comparable	
Reciprocity	Willingness to return a favor	0.11 [-0.07; 0.29]	0.06 [-0.12; 0.23]	0.30***	exp different;	
Reciprocity (diff)	Willingness to return a favor	0.21** [0.03; 0.38]	0.14 [-0.04; 0.31]		survey comparable	
Altruism	generalized, measure 1	Willingness to give to a charity	0.03 [-0.15; 0.21]	0.07 [-0.11; 0.24]	0.38***	comparable
	generalized, measure 2	Willingness to share with others	-0.06 [-0.23; 0.12]	-0.02 [-0.20; 0.16]	0.23***	comparable
	in-group, measure 1	Willingness to give to a charity that helps people in ancestral home area	-0.03 [-0.21; 0.15]	-0.09 [-0.26; 0.09]	n.a.	
	in-group, measure 2	Willingness to share with others from ancestral home area	-0.05 [-0.23; 0.13]	-0.05 [-0.22; 0.13]	n.a.	
	out-group, measure 1	Willingness to give to a charity that helps people in other parts of Kenya than ancestral home area	0.18** [0.01; 0.36]	0.12 [-0.06; 0.29]	n.a.	
	out-group, measure 2	Willingness to share with people from other parts of Kenya than ancestral home area	0.12 [-0.06; 0.30]	0.13 [-0.04; 0.30]	n.a.	
Anti-social behavior	generalized, measure 1	Willingness to cause troubles to other people	-0.1 [-0.28; 0.08]	-0.05 [-0.22; 0.13]	n.a.	
	generalized, measure 2	Willingness to make harm to other people	0.01 [-0.17; 0.19]	0.05 [-0.13; 0.22]	n.a.	
	in-group, measure 1	Willingness to cause troubles to people in ancestral home area	-0.02 [-0.20; 0.17]	-0.003 [-0.19; 0.18]	n.a.	
	in-group, measure 2	Willingness to make harm to people in ancestral home area	0.11 [-0.08; 0.30]	0.15 [-0.04; 0.32]	n.a.	
	out-group, measure 1	Willingness to cause troubles to people from other parts of Kenya than ancestral home area	-0.01 [-0.19; 0.17]	0.02 [-0.16; 0.19]	n.a.	
	out-group, measure 2	Willingness to make harm to people from other parts of Kenya than ancestral home area	0.01 [-0.17; 0.19]	0.03 [-0.15; 0.21]	n.a.	

Notes: Column 1 displays OLS coefficients in a regression of the standardized experimental measure on the standardized module items. Column 2 displays Spearman correlations between the survey item and the respective experimental measure (one for each preference type, except for reciprocity, where we use two experimental measures). ***, **, and * denote significance at the 1-, 5-, and 10-percent level, respectively. Below each OLS coefficient and Spearman correlation,

the table reports 95% confidence interval in the square brackets. Column 3 displays the correlation between experimental and qualitative survey measure from the validation study of Becker et al. (2016) among university students in Germany. Column 4 indicates to what extent measures from our study in Kenya and measures from the German study are comparable.

ONLINE APPENDIX

APPENDIX A

Additional Tables

Table A1: Summary statistics

	Mean (1)	Std. Dev. (2)	Min (3)	Max (4)	N (5)
<i>Panel A: Experimental measures</i>					
Time preference	9.15	9.11	1	26	123
Risk preference	6.82	6.05	1	22	123
Ambiguity aversion	0.24	0.43	0	1	123
Reciprocity	257.33	259.37	0	1000	123
Reciprocity (diff)	179.8	260.73	-400	1000	123
Altruism - generalized	205.45	213.7	0	1000	123
Altruism - in-group	213.13	221.65	0	1000	123
Altruism - out-group	165.71	183.31	0	1000	123
Anti-social behavior - generalized	0.2	0.4	0	1	123
Anti-social behavior - in-group	0.23	0.43	0	1	115
Anti-social behavior - out-group	0.38	0.49	0	1	123
<i>Panel B: Survey quantitative measures</i>					
Time preference	7.58	11.92	1	32	123
Risk preference	11.93	11.11	1	32	123
Ambiguity aversion	0.24	0.43	0	1	123
Reciprocity	269.15	403.87	0	2000	123
Altruism - generalized	645.45	689	0	3200	123
Altruism - in-group	708.82	712.68	0	3200	123
Altruism - out-group	663.65	724.59	0	3200	123
Anti-social behavior - generalized	0.17	0.38	0	1	123
Anti-social behavior - in-group	0.19	0.39	0	1	123
Anti-social behavior - out-group	0.24	0.43	0	1	123
<i>Panel C: Survey qualitative measures</i>					
Time preference	7.54	3.03	0	10	123
Risk preference	6.93	2.94	0	10	123
Reciprocity	8.92	2.22	0	10	123
Altruism - generalized, measure 1	6.89	3.34	0	10	123
Altruism - in-group, measure 1	7.63	3.02	0	10	123
Altruism - out-group, measure 1	6.81	3.21	0	10	123
Altruism - generalized, measure 2	7.72	3.04	0	10	123
Altruism - in-group, measure 2	7.32	3.29	0	10	123
Altruism - out-group, measure 2	7.02	3.37	0	10	123
Anti-social behavior - generalized, measure 1	2.37	3.56	0	10	123
Anti-social behavior - in-group, measure 1	2.37	3.69	0	10	123
Anti-social behavior - out-group, measure 1	2.17	3.39	0	10	123
Anti-social behavior - generalized, measure 2	1.98	3.47	0	10	123
Anti-social behavior - in-group, measure 2	2.24	3.7	0	10	123
Anti-social behavior - out-group, measure 2	1.97	3.42	0	10	123
<i>Panel D - Observable characteristics</i>					
Age	29.79	4.82	20	46	119
Female	0.54	0.5	0	1	123
Unemployed	0.54	0.5	0	1	123
Number of children	1.92	1.62	0	9	123

Table A2: Robustness checks – correlations between quantitative survey measures and experimental measures

Preference type (dependent variable - experimental measure, explanatory variable - quantitative survey measure)	Controlling for:					Sub-sample	
	No controls (1)	Qualitative measure(s) (2)	Understanding; and consistency (where applicable) (3)	Age, gender, being unemployed and number of children (4)	Order of tasks and order of survey/experiments; and understanding and consistency (where applicable) (5)	Survey questions in the first week (6)	Experimental choices in the first week (7)
Time preference	0.33*** (0.09)	0.33*** (0.09)	0.31*** (0.08)	0.35*** (0.09)	0.33*** (0.08)	0.31*** (0.10)	0.39*** (0.14)
Risk preference	0.21** (0.09)	0.22** (0.09)	0.25*** (0.09)	0.19** (0.09)	0.25*** (0.09)	0.32** (0.13)	0.12 (0.13)
Ambiguity aversion	0.13 (0.09)		0.14 (0.09)	0.09 (0.09)	0.12 (0.09)	0.18 (0.13)	0.08 (0.13)
Reciprocity	0.12 (0.09)	0.10 (0.09)		0.15 (0.09)	0.11 (0.09)	0.20 (0.13)	0.07 (0.13)
Reciprocity (diff)	0.06 (0.09)	0.04 (0.09)		0.07 (0.09)	0.06 (0.09)	0.13 (0.13)	0.03 (0.13)
Generalized altruism	0.41*** (0.08)	0.43*** (0.08)		0.44*** (0.09)	0.44*** (0.09)	0.33*** (0.10)	0.67*** (0.16)
In-group altruism	0.33*** (0.09)	0.36*** (0.09)		0.32*** (0.09)	0.36*** (0.09)	0.26** (0.10)	0.54*** (0.17)
Out-group altruism	0.40*** (0.08)	0.38*** (0.09)		0.35*** (0.09)	0.39*** (0.09)	0.27** (0.12)	0.54*** (0.12)
Generalized antisocial	0.05 (0.09)	0.06 (0.09)	0.04 (0.09)	0.05 (0.09)	0.05 (0.09)	-0.02 (0.12)	0.09 (0.14)
In-group antisocial	0.07 (0.10)	0.07 (0.10)		0.06 (0.10)	0.09 (0.10)	0.08 (0.12)	0.08 (0.16)
Out-group antisocial	0.14 (0.09)	0.14 (0.09)		0.14 (0.09)	0.13 (0.09)	0.24* (0.13)	0.03 (0.13)

Notes: OLS, standard errors in parentheses. Each cell provides a coefficient from a separate regression, in which the dependent variable is the experimental measure of a given preference type, and the explanatory variable is a quantitative survey measures of the same preference type. All measures of preferences are standardized. ***, **, and * denote significance at the 1-, 5-, and 10-percent level, respectively.

Table A3: Correlations between quantitative survey measures and experimental measures: by education and memory

Preference	Quantitative survey item	Sub-samples				
		Below- median education (1)	Above- median education (2)	Below- median memory (3)	Above- median memory (4)	
Time	Staircase measure: 5 interdependent choices between an early and delayed amount of money	0.35***	0.62***	0.26**	0.57***	
Risk	Staircase measure: 5 interdependent choices between a lottery and varying safe options	0.22**	0.37*	0.19	0.32***	
Ambiguity aversion	Hypothetical choice between a bag with known and unknown number of balls of different color	0.11	0.11	0.21	0.10	
Reciprocity	Hypothetical choice of the amount of a gift given to a stranger who provided help	0.32***	0.25	0.41***	0.18	
Reciprocity (diff)	Hypothetical choice of the amount of a gift given to a stranger who provided help	0.25**	0.06	0.33**	0.03	
Altruism	generalized	Hypothetical choice of the amount donated to a charity (out of Ksh3200)	0.39***	0.43**	0.50***	0.32**
	in-group	Hypothetical choice of the amount donated to a charity that helps people in ancestral home area (out of Ksh3200)	0.39***	0.33*	0.45***	0.30**
	out-group	Hypothetical choice of the amount donated to a charity that helps people in other parts of Kenya than ancestral home area (out of Ksh3200)	0.36***	0.44**	0.44***	0.33***
Anti-social behavior	generalized	Hypothetical decision between (3200, 3200) or (3150, 1600) for self and for another person	0.03	-0.09	-0.01	0.10
	in-group	Hypothetical decision between (3200, 3200) or (3150, 1600) for self and for a person from ancestral home area	-0.03	0.46**	0.12	0.01
	out-group	Hypothetical decision between (3200, 3200) or (3150, 1600) for self and for a person from other parts of Kenya than ancestral home area	0.10	0.33*	0.21	0.07
Number of observations		89	29	58	65	

Notes: The table displays Spearman correlations between the survey item and the respective experimental measure (one for each preference type, except of reciprocity where we use two experimental measures), for different sub-samples. ***, **, and * denote significance at the 1-, 5-, and 10-percent level, respectively.

Table A4: Correlations between qualitative survey measures and experimental measures: by education and memory

Preference	Qualitative survey item	Sub-samples				
		Below- median education (1)	Above- median education (2)	Below- median memory (3)	Above- median memory (4)	
Time	Willingness to give up something that is beneficial today in order to benefit more in the future	0.10	0.09	0.27**	-0.11	
Risk	Willingness to take risks	-0.01	-0.13	-0.00	-0.06	
Reciprocity	Willingness to return a favor	0.05	0.36*	0.08	0.12	
Reciprocity (diff)	Willingness to return a favor	0.15	0.22	0.23*	0.03	
Altruism	generalized, measure 1	Willingness to give to a charity	0.02	0.18	0.09	0.02
	generalized, measure 2	Willingness to share with others	-0.05	0.19	-0.01	-0.02
	in-group, measure 1	Willingness to give to a charity that helps people in ancestral home area	-0.07	-0.16	-0.18	-0.05
	in-group, measure 2	Willingness to share with others from ancestral home area	-0.05	0.11	-0.03	-0.08
	out-group, measure 1	Willingness to give to a charity that helps people in other parts of Kenya than ancestral home area	0.12	0.06	0.15	0.03
	out-group, measure 2	Willingness to share with people from other parts of Kenya than ancestral home area	0.18*	0.23	0.22*	0.06
Anti-social behavior	generalized, measure 1	Willingness to cause troubles to other people	-0.10	-0.06	-0.16	0.09
	generalized, measure 2	Willingness to make harm to other people	-0.02	0.16	-0.05	0.15
	in-group, measure 1	Willingness to cause troubles to people in ancestral home area	-0.01	-0.15	-0.01	-0.03
	in-group, measure 2	Willingness to make harm to people in ancestral home area	0.11	0.20	0.13	0.13
	out-group, measure 1	Willingness to cause troubles to people from other parts of Kenya than ancestral home area	0.03	0.03	0.10	-0.05
	out-group, measure 2	Willingness to make harm to people from other parts of Kenya than ancestral home area	0.04	0.04	0.10	-0.01
Number of observations		89	29	58	65	

Notes: The table displays Spearman correlations between the survey item and the respective experimental measure (one for each preference type, except of reciprocity where we use two experimental measures), for different sub-samples. ***, **, and * denote significance at the 1-, 5-, and 10-percent level, respectively.

Table A5: Explanatory power of quantitative and qualitative survey measures

	Controlling for		Controlling for		Controlling for	
	No controls	qualitative measure(s)	No controls	qualitative measure(s)	No controls	qualitative measure(s)
	(1)	(2)	(3)	(4)	(5)	(6)
Preference type	Time preference		Risk preference		Ambiguity aversion	
Quantitative survey measure	0.33*** (0.09)	0.33*** (0.09)	0.21** (0.09)	0.22** (0.09)	0.13 (0.09)	
Qualitative survey measure		0.05 (0.09)		0.06 (0.09)		
R ²	0.11	0.11	0.04	0.05	0.02	
Preference type	Generalized altruism		In-group altruism		Out-group altruism	
Quantitative survey measure	0.41*** (0.08)	0.43*** (0.08)	0.33*** (0.09)	0.36*** (0.09)	0.40*** (0.08)	0.38*** (0.09)
Qualitative survey measure 1		-0.01 (0.09)		-0.12 (0.11)		0.06 (0.10)
Qualitative survey measure 2		-0.12 (0.09)		-0.01 (0.10)		0.00 (0.10)
R ²	0.17	0.18	0.11	0.12	0.16	0.16
Preference type	Generalized anti-social		In-group anti-social		Out-group antisocial	
Quantitative survey measure	0.05 (0.09)	0.06 (0.09)	0.07 (0.10)	0.07 (0.10)	0.14 (0.09)	0.14 (0.09)
Qualitative survey measure 1		-0.15 (0.11)		-0.15 (0.12)		-0.03 (0.12)
Qualitative survey measure 2		0.10 (0.11)		0.20 (0.12)		0.01 (0.12)
R ²	0.00	0.02	0.01	0.03	0.02	0.02
Preference type	Reciprocity		Reciprocity (diff)			
Quantitative survey measure	0.12 (0.09)	0.10 (0.09)	0.06 (0.09)	0.04 (0.09)		
Qualitative survey measure		0.10 (0.09)		0.20** (0.09)		
R ²	0.01	0.02	0.00	0.04		

Notes: OLS, standard errors in parentheses. In each regression, the dependent variable is the experimental measure of a given preference type, and the explanatory variable is a quantitative survey measure of the same preference type. In Columns 2, 4 and 6, controls for qualitative survey measure(s) of the same preference type is/are added. All measures of preferences are standardized. ***, **, and * denote significance at the 1-, 5-, and 10-percent level, respectively.

Table A6: Comparison of quantitative survey measures (validation in Kenya, validation in Germany, GPS)

	Validation in Kenya	Validation in Germany	Global Preference Survey - Kenya
Time preference	<i>Suppose you were given the choice between receiving a payment today or a payment in 12 months. We will now present to you five situations. The payment today is the same in each of these situations. The payment in 12 months is different in every situation. For each of these situations we would like to know which you would choose. Please assume there is no inflation, i.e. future prices are the same as today's prices. Would you rather receive 300 shillings today or 461 shillings in 12 months?</i>	<i>Suppose you were given the choice between the following: receiving a payment today or a payment in 12 months. We will now present to you five situations. The payment today is the same in each of these situations. The payment in 12 months is different in every situation. For each of these situations we would like to know which you would choose. Would you rather receive 100 Euro today or 153.8 Euro in 12 months?</i>	<i>Suppose you were given the choice between receiving a payment today or a payment in 12 months. We will now present to you five situations. The payment today is the same in each of these situations. The payment in 12 months is different in every situation. For each of these situations we would like to know which you would choose. Please assume there is no inflation, i.e. future prices are the same as today's prices. Would you rather receive 300 shillings today or 461 shillings in 12 months?</i>
Risk preference	<i>Please imagine the following situation: You can choose between a sure payment of a particular amount of money, or a draw, where you would have an equal chance of getting 900 shillings or getting nothing. We will present to you five different situations. What would you prefer: A draw with a 50-percent chance of receiving KSH. 900 and the same 50-percent chance of receiving nothing, OR the amount of KSH. 480 as a sure payment?</i>	<i>Please imagine the following situation: You can choose between a sure payment and a lottery. The lottery gives you a 50 percent chance of receiving 300 Euro. With an equally high chance you receive nothing. Now imagine you had to choose between the lottery and a sure payment. We will present to you five different situations. The lottery is the same in all situations. The sure payment is different in every situation. What would you prefer: a 50 percent chance of winning 300 Euro when at the same time there is 50 percent chance of winning nothing, or would you rather have the amount of 160 Euro as a sure payment?</i>	<i>Please imagine the following situation: You can choose between a sure payment of a particular amount of money, or a draw, where you would have an equal chance of getting 900 shillings or getting nothing. We will present to you five different situations. What would you prefer: a draw with a 50 percent chance of receiving KSH. 900, and the same 50 percent chance of receiving nothing, or the amount of KSH. 480 as a sure payment?</i>
Altruism	<i>Imagine the following situation: Today you unexpectedly received 3,200 shillings. How much of this amount would you donate to a charity?</i>	<i>Imagine the following situation: you won 1,000 Euro in a lottery. Considering your current situation, how much would you donate to charity?</i>	<i>Imagine the following situation: Today you unexpectedly received 3,200 shillings. How much of this amount would you donate to a good cause?</i>
Positive reciprocity	<i>Please think about what you would do in the following situation. You are in a city you are not familiar with, and you realize you lost your way. You ask a stranger for directions. The stranger offers to walk with you and show you the way to your destination. By helping you the stranger misses an hour of work and thus loses 50 shillings in total. However, the stranger says he or she does not want any money from you. When you arrive to your destination, you can buy a gift for the stranger in a shop. Do you buy a "thank-you"- gift for the stranger? [If yes, ask:] How much money will you spend on the present?</i>	<i>Imagine the following situation: you are shopping in an unfamiliar city and realize you lost your way. You ask a stranger for directions. The stranger offers to take you with their car to your destination. The ride takes about 20 minutes and costs the stranger about 20 Euro in total. The stranger does not want money for it. You carry six bottles of wine with you. The cheapest bottle costs 5 Euro, the most expensive one 30 Euro. You decide to give one of the bottles to the stranger as a thank-you gift. Which bottle do you give? (Options: The bottle for 5/10/15/20/25/30 Euro)</i>	<i>Please think about what you would do in the following situation. You are in an area you are not familiar with, and you realize that you lost your way. You ask a stranger for directions. The stranger offers to take you to your destination. Helping you costs the stranger about KSh 60 in total. However, the stranger says he or she does not want any money from you. You have six presents with you. The cheapest present costs KSh 15, the most expensive one costs KSh 90. Do you give one of the presents to the stranger as a "thank-you" gift?" The participants could choose between giving no presents, or a present which costs KSh. 15/30/45/60/75/90</i>

Table A7: Comparison of qualitative survey measures (validation in Kenya, validation in Germany, GPS)

	Validation in Kenya	Validation in Germany	Global Preference Survey - Kenya
Time preference	<i>How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?</i>	<i>Are you a person who is generally willing to give up something today in order to benefit from that in the future, or are you not willing to do so?</i>	<i>How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?</i>
Risk preference	<i>Please tell me, in general, how willing or unwilling you are to take risks. Let me explain what I mean by risk. Imagine you are going to start a business. You are going to take risk because you do not know if the business will succeed or if it will fail.</i>	<i>Generally speaking, are you a person who is willing to take risks or do you try to avoid risks?</i>	<i>Please tell me, in general, how willing or unwilling you are to take risks.</i>
Altruism 1	<i>How willing are you to give to a charity without expecting anything in return?</i>	<i>How do you assess your willingness to share with others without expecting anything in return when it comes to charity?</i>	<i>How willing are you to give to good causes without expecting anything in return?</i>
Altruism 2	<i>Are you a person who is generally willing to share with others without expecting something in return, or are you not willing to do so?</i>	<i>Are you a person who is generally willing to share with others without expecting something in return, or are you not willing to do so?</i>	n.a.
Positive reciprocity	<i>How well does the following statement describe you as a person? When someone does me a favor I am willing to return it.</i>	<i>How well do the following statements describe you as a person? When someone does me a favor I am willing to return it.</i>	<i>How well do the following statements describe you as a person? When someone does me a favor I am willing to return it.</i>

APPENDIX B

Design of the validation experiment

Below, we describe in detail how we elicited each of the experimental and survey measures. The full experimental and survey protocols in English and Swahili are available in Appendix C and D.

Sample

The sample in our study are 123 participants from the Kibera neighborhood in Nairobi, Kenya during August 2018. The participants come from a low income environment, are between 20 and 46 years of age, more than a half are unemployed, half of them are women and on average they have two children. The average monthly earnings among those who reported this measure (N=57) is approximately USD 96.

Experimental measures

We conducted a set of incentivized choice experiments in which each type of preferences is elicited in one experimental task. Specifically, we implemented ten experiments in total, focusing on the following types of preferences: time preference, risk preference, reciprocity, ambiguity aversion, generalized altruism, in-group altruism, out-group altruism, generalized anti-social behavior, in-group antisocial behavior, and out-group antisocial behavior.

Where relevant, for convenience we compare the similarities and differences between our approach and the original validation experiment implemented by Becker, Dohmen, Huffman, Falk, & Sunde (2016) - BDHFS. BDHFS also elicited measures of time preference, risk preference, altruism, and reciprocity. We will focus on comparison of the experiments in these four domains where there is an overlap between the two studies. In addition, BDHFS elicited measures of trust and negative reciprocity, and they implemented nine experiments in total.

Time preference

We conducted an experiment that involved 25 binary choices between a payment “today” and a higher payment that would be received in 3 months in the future. The delayed payment in each subsequent binary choice increased such that the implied 3-months return from waiting would rise in steps of 5 percentage points from 0 percent in the first binary choice to 120 percent in the 25th binary choice. The payment today was in all 25 binary choices KSh 600, while the payment in 3 months increased from KSh 600 in the first binary choice to KSh 1320 in the last binary choice. (The exchange rate during the study period was approximately 100 KSh to 1 USD.) If a choice in this experiment was selected to be payoff relevant, the money was sent to participant’s mobile phone via M-PESA, either on the day of the experiment, or 3 months later. The row in which a participant switched from preferring the earlier payment to the larger delayed payment provides a measure of time preference.

BDHFS conducted two experiments to elicit measures of time preference with 25 binary choices each. In both price lists, participants had to trade-off a payment of 400 points “today” and a higher payment that would be received 12 months in the future. In one price list, the delayed amount was increased such that

the implied annual return from waiting would rise in steps of 2.5 percentage points from 0 percent in the first row to 60 percent in the 25th row. In the second price list the delayed payments were perturbed by adding or subtracting an amount of up to 0.6 points. The payments were sent by regular mail. In both experiments, the row in which a participant switched from preferring the earlier payment to the larger delayed payment provides a measure of impatience. The ultimate measure of time preference was constructed by averaging the switching rows in the two discounting experiments.

Our experiment closely follows the first experiment implemented by BDHFS. It differs in terms of (i) the amount of the payment “today”, (ii) the delay (3 months instead of 12 months) and (iii) the annual return from waiting. We changed the delay and the interest rate based on a pilot study which suggested that there would be limited variation in the measure of time preference if we used exactly the same parameters as in BDHFS.

Risk preference

We conducted an experiment that involved 21 binary choices between a safe payment and a lottery that yielded with equal probability KSh 0 or KSh 2,000. The lottery was the same in all binary choices, while the safe payment was increased in steps of KSh 100 from KSh 0 in the first binary choice to KSh 2,000 in the 21st binary choice. Also, here we follow closely the approach of BDHFS who implemented this experiment, the difference being the specific amounts. In their case, the lottery was between 0 and 1,000 points, while the safe payment was increased in steps of 50 points from 0 to 1,000. In addition, BDHFS implemented a second price list in which they perturbed the safe payments by adding or subtracting up to five points to each safe payment alternative. The row in which a participant switched from preferring the lottery to preferring the safe payment is a measure of risk preference. The measure in BDHFS is constructed by averaging the switching rows in the two experiments.

Altruism

Each participant was endowed with KSh 1,000 and had to decide how much of that amount to donate to a charity that helps people in Kenya. The task is similar to BDHFS, with rather small differences in the wording. In BDHFS, participants were endowed with 300 points and made a decision how many points to assign to a charitable organization (by choosing a specific organization from a provided list or by naming a different one). The amount donated to a charity is a measure of altruism.

Reciprocity

Each participant was endowed with KSh 1,000 and had to decide how much of that amount to give to two other people who visited the lab in the past. The participants were informed that each of these people received two bags of sugar and could decide to leave one of the bags for a future visitor of the lab. One of them decided to give a bag of sugar while the other one not. We use two measures of reciprocity – the amount assigned to the “kind” person who left a bag of sugar for the participants, and the difference in the amounts assigned to the “kind” person and to the other person who did not leave a bag of sugar for the participant. Our measure of reciprocity differs from that of BDHFS who elicit the measure of positive reciprocity from second mover behavior in the Trust game.

We elicited further measures of preferences which were not included in the BDHFS study.

Ambiguity aversion

We conducted an experiment in which participants made a choice whether to draw a ball from one or from another jar. In jar 1, there were ten balls, out of which four were green and six were yellow. In jar 2, there were also ten balls, but the number of green and yellow balls was unknown. If jar 1 was chosen, the participant needed to draw a green ball to win KSh 1,000. If jar 2 was chosen, the participant needed to choose a color and draw a ball of that color to win KSh 1,000. The choice of jar 1 is our measure of ambiguity aversion.

Anti-social behavior

In the task related to anti-social behavior, each participant was matched with an anonymous person from Kenya and both of them received an endowment of KSh 1,000. The participant made a choice between two options. The first one was to keep KSh 1,000 for self and KSh 1,000 for the other person. The second one was to lower the amount of the other person by KSh 500, but this cost the participant KSh 20, and thus the participant would receive KSh 980 and the other person KSh 500. The choice of the second option is our measure of anti-social behavior.

In-group and out-group measures of altruism and anti-social behavior

In total, we elicited three measures of altruism and three measures of anti-social behavior. Besides the generalized measures described above, we elicited a measure of behavior towards members of participants' in-group and towards out-group members. In the in-group version of the experiment on altruism, the participants were informed that they could donate a part of their endowment to a charity that helped people in their ancestral home area. Similarly, in the in-group version of the experiment on anti-social behavior, they were informed they were matched with an unknown person from their ancestral home area. In the out-group version of the experiment on altruism, they were informed that the charity helped people from other parts of Kenya than their ancestral home area. In the out-group version of the experiment on anti-social behavior they were matched with an unknown person from Kenya, but not from their ancestral home area. The formulation "from your home area" was carefully selected from a list of possible information indicating one's own ethnic group based on a detailed conversation with the Innovations for Poverty Action (IPA) field team in Kenya.

Survey measures

To measure each type of preference, we use one quantitative survey measure and one or two qualitative survey measures (one for time preference, risk preference and reciprocity; two for altruism and anti-social behavior). The only exception is ambiguity aversion for which there is only one quantitative survey measure. The quantitative questions present a hypothetical scenario that mimics closely the experimental task. The qualitative questions measure willingness to act in a certain way on 0-10 scale. In total, the participants answered 25 survey questions.

In their validation experiment, BDHFS used a larger number of survey questions to measure each type of preference. In total, they included 199 questions. Then, the researchers identified the best linear combination of items for measuring a particular preference type and these items were selected to be included in GPS. For some measures, the researchers, when developing this streamlined version of the survey module, used survey items which have slightly lower predictive power but are simpler and faster to implement. In some cases, they also adjusted the wording such that it can be used in different cultures. For example, instead of asking the whole set of binary choices on time/risk preference which is time-consuming, only a sub-set of five interdependent questions was included in GPS.

In our study, the survey questions on time preference, risk preference, reciprocity and altruism follow closely the GPS questions. We use identical wording (time preference quantitative and qualitative, risk preference quantitative, reciprocity qualitative), adjusted wording (altruism quantitative and qualitative, reciprocity quantitative), or an expanded wording (risk preference qualitative) of the questions included in the Swahili version of GPS for Kenya. Tables A6 and A7 provide comparison of the full wording of the survey questions in our validation in Kenya, the questions used in the validation in Germany and the questions used in GPS in Kenya.

In addition, we designed new questions on other types of preferences we are interested in (ambiguity aversion, anti-social behavior) and include the in-group and out-group versions of questions on altruism and anti-social behavior.

Time preference

Quantitative measure. Since the experiment involved 25 binary choices and making decision in all of these is rather time-consuming, for the quantitative survey measure we use the “staircase” or “unfolding brackets” procedure where each participant answered a sub-set of five binary choices. First, they made a choice between KSh 300 today or KSh 461 in 12 months. In the second and all subsequent binary choices, the immediate payment remained the same, but the delayed payment changed based on the previous decision. If the participant had chosen the immediate payment, the delayed payment in the subsequent binary choice was increased. If the participant had chosen the delayed payment, the delayed payment in the subsequent binary choice was decreased. In total, there were 31 binary choices out of which each participants faced five. The measure of time preference takes the values between 1 (preference of the immediate payment in a situation with the highest delayed payment, specifically KSh 644) and 32 (preference of delayed payment in a situation with the lowest delayed payment, specifically KSh 309).

Qualitative measure. In the qualitative survey item, the participants were asked “How willing are you to give up something that is beneficial for you today in order to benefit from that in the future?” and indicated their answer on a scale from 0 to 10 where 0 means “completely unwilling to do so”, and 10 means “very willing to do so”.

Risk preference

Quantitative measure. Similarly to time preference, to elicit quantitative survey measure of risk preference, we use the “staircase” method. First, the participants made a choice between a draw with a 50-percent chance of receiving KSh 900 and the same 50-percent chance of receiving nothing, or the amount of KSh 480 as a sure payment. In the second and all subsequent decisions, the lottery remained the same. If the participant had chosen the safe option, the safe option in the subsequent question was smaller. If the participant had chosen the lottery, the safe option in the subsequent question was larger. In total, there were 31 binary choices out of which each participants faced five. The measure of risk preference takes the values between 1 (preference of sure payment in a situation with the lowest sure payment, specifically KSh 30) and 32 (preference of lottery in a situation with the highest sure payment, specifically KSh 930).

Qualitative measure. In the qualitative survey item, the participants were asked “Please tell me, in general, how willing or unwilling you are to take risks. Let me explain what I mean by risk. Imagine you are going to start a business. You are going to take risk because you do not know if the business will succeed or if it will fail.” and indicated their answer on a scale from 0 to 10 where 0 means “completely unwilling to take risks”, and 10 means “very willing to take risks”. The qualitative survey measure of risk preference is similar to the GPS-Kenya question, but based on a pilot session which revealed that the participants had

hard times to understand the term “risks”, we expanded the wording adding an explanation what we mean by risk.

Altruism

Quantitative measure. The participants were asked “Imagine the following situation: Today you unexpectedly received KSh 3,200. How much of this amount would you donate to a charity?”.

Qualitative measures. We use two qualitative survey measures of altruism. One asks respondents “How willing are you to give to a charity without expecting anything in return?”. The participants rate their willingness on 0-10 scale. The second question is “Are you a person who is generally willing to share with others without expecting anything in return, or are you not willing to do so?” This was used by BDHFS in their validation experiment but was not selected to be included in GPS.

Reciprocity

Quantitative measure. The participants were described the following scenario: “Please think about what you would do in the following situation. You are in a city you are not familiar with, and you realize you lost your way. You ask a stranger for directions. The stranger offers to walk with you and show you the way to your destination. By helping you the stranger misses an hour of work and thus loses 50 shillings in total. However, the stranger says he or she does not want any money from you. When you arrive to your destination, you can buy a gift for the stranger in a shop.” Then they were asked whether they buy a “thank-you” gift for the stranger and how much money they would spend on the present. The amount spent on the present is our quantitative measure of reciprocity. The quantitative question on reciprocity in GPS-Kenya is similar in spirit, but again we made some adjustments in the wording based on the pilot and discussions with the local team.

Qualitative measure. The participants were asked to say how well the following statement describes them: “When someone does me a favor I am willing to return it.” They provided answer on a scale from 0 to 10, where 0 means “does not describe me at all”, and 10 means “describes me perfectly”.

Ambiguity aversion

Quantitative measure. In the survey, we included a single (quantitative) measure of ambiguity aversion. The participants were asked to imagine that they were going to play a game and they were described the experimental task we implemented to elicit measure of ambiguity aversion.

Anti-social behavior

Quantitative measure. The participants were asked to imagine a situation mimicking the experimental task in which they and another unknown person unexpectedly received an opportunity to get KSh 3,200 each. Then they were asked to make a choice between two options, one in which both the participant and another person receive KSh 3,200, and one in which the participant receives KSh 3,150 and the other person receives KSh 1,600. The choice of the second option is our quantitative survey measure of anti-social behavior.

Qualitative measures. We designed two qualitative survey items to measure anti-social behavior. We asked participants “How willing or unwilling are you to cause troubles to other people?”, and “How willing or unwilling are you to make harm to other people?”. In both cases, the participants rated their willingness on a 0-10 scale.

In-group and out-group measures of altruism and anti-social behavior

We included the in-group and out-group variants of all three survey questions on altruism and of all three survey questions on anti-social behavior. As in the experiments, the distinction was made by using the formulation “from your ancestral home area” vs. “from other parts of Kenya other than your ancestral home area”

Payments and procedures

On average, the earnings of the participants from both the experimental and survey sessions were KSh 1,520, i.e. an equivalent of approximately five days earnings. Specifically, for the experimental part, the participant received a show up fee of KSh 250 (KSh 200 for participation and KSh 50 if they arrived on time). After they finished all the experimental tasks, one of the decisions they made was randomly selected to be payoff relevant. On average, the payoff was KSh 820. For the survey part, the participants received a show up fee of KSh 450 (KSh 400 plus KSh 50 if they arrived on time).

The participants visited the lab twice. During one session they made choices in all the experimental tasks, and during the other session they answered the survey questions. The two visits were one week apart and we randomized the order of the experiments vs. survey. This approach aims to limit the spillovers between the experimental and survey measures, for example due to an effort to give consistent answers. To address this concern further, we included a task to measure participants’ memory. In the first week, the participants were shown a set of ten letters from the alphabet on a screen for twenty seconds. In the second week, they were asked to recall these letters. In the analysis, we can test whether the correlation between experimental and survey measures is driven by participants with better memory. In the experimental session, we further randomized at the session level the order of a set of experiments focusing on (i) time preference, risk preference, and ambiguity aversion, and (ii) altruism, reciprocity, and anti-social behavior.

APPENDIX C

Experimental protocol

[Understanding this protocol: Text in brackets indicates instructions to the experimenter. Other text specifies instructions to the participants (to be read out).]

Introduction

[When all participants have arrived, been identified, and seated:]

Good day! A warm welcome to the Busara Center for Behavioral Economics. I see all participants are present. We'll soon go to the computer room. You will get paid KSH.200 for your participation and transport today, plus a further KSH.50 if you arrived on time. This money will be transferred to the phone number we used to contact you by M-PESA. If you want to change the phone number to a different one, please let us know now.

Siku Njema! Karibuni Busara Center for Behavioral Economics. Naona washiriki wote wako hapa. Tutaenda katika chumba cha utafiti, Utalipwa 200ksh kwa kushiriki kwako na nauli, pia, utaweza kupata KSH 50 zaidi iwapo uliwasili mapema. Pesa hii utatumiwa kwenye nambari yako ya simu tuliyo kupata nayo tulipo kupigia simu. Uki hitaji kubadilisha nambari hii, tafadhali tujulishe Sasa.

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, due to the nature of the study, from now on you are not allowed to talk to other participants. If you talk to other participants, we will have to send you home and you cannot get paid. 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.

Kabla ya kuanza,ningeomba tufanye mambo matatu. Kwanza zima simu yako sasa na ibaki imezimwa hadi mwisho wa kikao hiki. Hii inakusaidia ili usiweze kutatizika wakati utakapo kua unafanya shughuli. Pili ukiwa umeketi humu ndani hauruhusiwi kuzungumza na washiriki wengine. Uki zungumza na washiriki wengine ,tuta kutuma nyumbani bila malipo. Ukiwa na swali,tafadhali inua mkono wako na mtafiti atakuja kuongea na wewe. La tatu, tafadhali,usiguze kompyuta kabla hatujakueleza kufanya hivyo.

While we wait to begin, please use the bathroom now, or you will have to wait until the session is over. It may, therefore, be a good idea to go now, even if it isn't urgent.

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

Tukisubiri kuanza,tafadhali tumia msala sasa, ama itakubidi kungoja hadi utafiti umalizike. Inaweza kuwa ni wazo nzuri, hata kama hauhisi kuwa na haja.

je, simu ya kila mtu imezimwa? Sawa. sasa tutaelekea katika chumba cha kompyuta,ambapo nitakupa habari zaidi kuhusu somo la leo. Tafadhali tafuta kompyuta iliyo na nambari ya kadi uliyo pewa na uketi. Pia kumbuka hamuruhusiwi kuzungumziana kuanzia sasa,na tafadhali usiguze kompyuta hadi tutakapo kueleza ufanye hivyo.

Gaining consent

[After all participants are seated at their workstations:]

Welcome again to Busara. You are about to participate in a research study that seeks to better understand how people behave in different situations. 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 from Busara.

Karibu tena Busara. Uko karibu kuanza somo la utafiti ambayo inataka kuelewa vyema jinsi watu hutenda katika hali tofauti. Mbele yako kuna fomu ya idhini ambayo inakuelezea sababu ya utafiti huu na haki zako. Inasema kuwa somo hili ni kwa madhumuni ya utafiti tu. Majibu yako yatawekwa kwa siri na haita husishwa na jina lako wala kupewa yeyote isipokua watafiti.

You have the right to leave at any time. We would like to ask for your consent to participate by signing this form. So please look at the form now and sign it. If you have any questions, please raise your hand and someone will come to assist you.

Tungependa utupe idhini yako ya kushiriki, kwa kuweka sahihi nyuma ya fomu hii. Kwa hivyo, tafadhali angalia fomu yako na uweke sahihi hapo nyuma. Ukiwa na swali lolote tafadhali inua mkono wako na tutakusaidia.

Please click 'Next' to continue

[Experimenter

- *Fill in the subjects order of weeks*
- *Key in the subject survey ID]*

After consent

We will now begin with the tasks. At any time, if you don't understand any of the tasks that you are required to do, please raise your hand and you will be assisted. You all know that you will receive KSH.200 for coming to the study today, plus a bonus of KSH.50 if you have arrived on time. You can also receive an additional amount of money. This amount will depend on the choices you make here today.

Sasa tuta anza shughuli. Kwa wakati wowote utakapokuwa haelewi vile unavyo paswa kufanya shughuli , tafadhali inua mkono wako juu na uta saidiwa. Nyote mwajua yakua mutapokea KSH 200 kwa kushiriki kwa utafiti huu leo , na bonus ya KSH 50 iwapo ulifika mapema . Pia unaweza pata pesa zaidi, hii inalingana na maamuzi utakayo fanya leo.

You are going to make a number of decisions today that will influence how much money you or other people receive. You are not going to be paid for all of them. But, importantly, after you are finished with all the decisions, the computer will pick one of them for which you will be paid. Each of the decisions has the same chance to be picked. Thus you should choose as if each decision determined your payment. It is in your interest to carefully make your decision in all the tasks that will follow.

Uta fanya maamuzi kadhaa leo itakayo adhiri malipo yako na wengine watakayo pokea. Hautalipwa kwa maamuzi yote, lakini cha muhimu, baada ya kamilisha maamuzi , kompyuta ita chagua moja ambayo itatumiwa kwa malipo. Kila uamuzi una nafasi sawa ya kuchaguliwa. Kwa hivyo una paswa kuchagua kila uamuzi ni kama ndiyo itakayo amua malipo. Ni vyema kwako kufanya kila uamuzi kwa makini katika shughuli zote zitakazo fuatia.

Nobody in the room will be able to see your decisions and answers. When you make decisions and provide answers, I will stand aside. Also note that there are dividers in the room, so that you can make choices in complete privacy. You will have enough time to make choices and provide answers. We are not in a hurry, so please take your time to make each of your choices carefully.

Hakuna mtu katika chumba hiki ataona maamuzi na majibu yako. Unapofanya na kutoa majibu, nitasimama kando. Pia kumbuka kuwa tuna nikawaji kwa chumba, ili ufanye maamuzi kwa siri kabisa. Utakuwa na mda wa kutosha kufanya maamuzi na kuweka majibu. Hatuna haraka, tafadhali chukua muda wako kufanya kila moja ya maamuzi yako kwa makini.

Please click 'Next' to continue

Task 1 [TIME]

In this task, you will make 25 decisions between two options. One of these decisions can be the one chosen for payment, so you should choose as if each decision determined your payment. Therefore, it is in your interest to carefully pick the option you truly prefer.

Katika shughuli hii utafanya maamuzi 25 kati ya chaguo mbili. Moja wapo ya maamuzi haya inaweza tumika kwa malipo, kwa hivyo unapaswa kuchagua ni kama kila uamuzi utaamua malipo yako. Kwa hivyo, ni muhimu uchague chaguo unalopendelea Zaidi.

In each of the 25 questions, you will be asked to make a decision between receiving a payment today or a payment in 3 months. The first option is to get KSH.600 today. The payment today is the same in all 25 decisions you will make. If you decide to receive the payment today, KSH.600 will be sent later today to your mobile phone via M-PESA.

Kwa kila ya maswali 25, utaulizwa kufanya uamuzi kati ya kupata malipo leo au baada ya miezi 3. Chaguo la kwanza ni kupokea KSH.600 leo. Malipo ya leo ni ile ile kwa maamuzi yote utakayo fanya. Ikiwa uta amua kupokea malipo ya leo, utatumiwa KSH.600 baadaye kwa simu yako kupitia M-PESA.

The second option is to get a higher amount of money in 3 months. The amount differs in each of the 25 decisions you will make. If you decide to receive the payment in 3 months, it will be sent on that date to your mobile phone via M-PESA.

[The experimenter explains that it will be on November XX, 2018].

Chaguo la pili ni kupata kiasi cha juu cha pesa katika miezi 3 ijayo. Kiasi kinatofautiana katika kila moja ya maamuzi 25 ambayo utafanya. Ikiwa utaamua kupokea malipo kwa miezi 3, itatumwa hiyo siku kwa simu yako kupitia M-PESA.

Please click 'Next' to continue

Example 1, Payoff 1

Let's take an example which is illustrated on the computer screen.

Wacha tuchukue mfano ulioelezwa kwa skrini.

Imagine you can choose to receive KSH.600 today or KSH.810 in 3 months.

Fikiria yakwamba unaweza chagua kupokea KSH.600 leo au KSH 800 baada ya miezi 3.

Now please write on the computer how much money you receive if you decide for the option to receive the payment today.

Sasa tafadhali andika kwa kompyuta ni pesa ngapi utapokea ikiwa utaamua kuchagua kupokea malipo yako leo.

Please click 'Next' to continue

Example 1, Payoff 2

Now please write on the computer how much money you receive if you decide for the option to receive the payment in 3 months.

Sasa tafadhali andika kwa kompyuta ni pesa ngapi utapokea ikiwa utaamua kuchagua kupokea malipo yako baada ya miezi 3.

Please click 'Next' to continue.

Remember, there is no correct answer; what we are interested is your personal preference. Are there any questions? If you have a question while you complete the task, please raise your hand and we will assist you.

Kumbuka hakuna jibu lililo sahihi; tuna nia tu ya kujua mapendeleo yako ya kibinafsi. Je kuna swali lolote? Iwapo una swali unapo kamilisha shughuli hizi, tafadhali inua mkono na tutakusaidia.

Please click 'Next' to continue.

1. *What do you choose?*
 - a. *To receive KSH.600 today.*
 - b. *To receive KSH.600 in 3 months.*
1. Utachagua nini?
 - a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.600 baada ya miezi 3.
2. *What do you choose?*
 - a. *To receive KSH.600 today.*
 - b. *To receive KSH.630 in 3 months.*
2. Utachagua nini?
 - a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.630 baada ya miezi 3.
3. *What do you choose?*
 - a. *To receive KSH.600 today.*
 - b. *To receive KSH.660 in 3 months.*
3. Utachagua nini?
 - a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.660 baada ya miezi 3.
4. *What do you choose?*
 - a. *To receive KSH.600 today.*
 - b. *To receive KSH.690 in 3 months.*
4. Utachagua nini?
 - a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.690 baada ya miezi 3.
5. *What do you choose?*
 - a. *To receive KSH.600 today.*
 - b. *To receive KSH.720 in 3 months.*
5. Utachagua nini?
 - a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.720 baada ya miezi 3.
6. *What do you choose?*
 - a. *To receive KSH.600 today.*
 - b. *To receive KSH.750 in 3 months.*
6. Utachagua nini?

- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.750 baada ya miezi 3.
7. *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.780 in 3 months.*
7. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.780 baada ya miezi 3.
8. *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.810 in 3 months.*
8. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.810 baada ya miezi 3.
9. *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.840 in 3 months.*
9. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.840 baada ya miezi 3.
10. *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.870 in 3 months.*
10. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.870 baada ya miezi 3.
11. *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.900 in 3 months.*
11. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.900 baada ya miezi 3.
12. *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.930 in 3 months.*
12. Utachagua nini?

- a. Kupokea KSH.600 leo.
b. Kupokea KSH.930 baada ya miezi 3.
- 13.** *What do you choose?*
a. *To receive KSH.600 today.*
b. *To receive KSH.960 in 3 months.*
13. Utachagua nini?
a. Kupokea KSH.600 leo.
b. Kupokea KSH.960 baada ya miezi 3.
- 14.** *What do you choose?*
a. *To receive KSH.600 today.*
b. *To receive KSH.990 in 3 months.*
14. Utachagua nini?
a. Kupokea KSH.600 leo.
b. Kupokea KSH.990 baada ya miezi 3.
- 15.** *What do you choose?*
a. *To receive KSH.600 today.*
b. *To receive KSH.1020 in 3 months.*
15. Utachagua nini?
a. Kupokea KSH.600 leo.
b. Kupokea KSH.1020 baada ya miezi 3.
- 16.** *What do you choose?*
a. *To receive KSH.600 today.*
b. *To receive KSH.1050 in 3 months.*
16. Utachagua nini?
a. Kupokea KSH.600 leo.
b. Kupokea KSH.1050 baada ya miezi 3.
- 17.** *What do you choose?*
a. *To receive KSH.600 today.*
b. *To receive KSH.1080 in 3 months.*
17. Utachagua nini?
a. Kupokea KSH.600 leo.
b. Kupokea KSH.1080 baada ya miezi 3.
- 18.** *What do you choose?*
a. *To receive KSH.600 today.*
b. *To receive KSH.1110 in 3 months.*
18. Utachagua nini?

- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.1110 baada ya miezi 3.
- 19.** *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.1140 in 3 months.*
19. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.1140 baada ya miezi 3.
- 20.** *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.1170 in 3 months.*
20. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.1170 baada ya miezi 3.
- 21.** *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.1200 in 3 months.*
21. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.1200 baada ya miezi 3.
- 22.** *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.1230 in 3 months.*
22. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.1230 baada ya miezi 3.
- 23.** *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.1260 in 3 months.*
23. Utachagua nini?
- a. Kupokea KSH.600 leo.
 - b. Kupokea KSH.1260 baada ya miezi 3.
- 24.** *What do you choose?*
- a. *To receive KSH.600 today.*
 - b. *To receive KSH.1290 in 3 months.*
24. Utachagua nini?

- a. Kupokea KSH.600 leo.
- b. Kupokea KSH.1290 baada ya miezi 3.

25. *What do you choose?*

- a. *To receive KSH.600 today.*
- b. *To receive KSH.1320 in 3 months.*

25. Utachagua nini?

- a. Kupokea KSH.600 leo.
- b. Kupokea KSH.1320 baada ya miezi 3.

Please click 'Next' to continue.

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Task 2 [RISK]

In this task, you will make 21 decisions between two options. One of these decisions can be the one chosen for payment, so you should choose as if each decision determined your payment. Therefore, it is in your interest to carefully pick the option you truly prefer.

Katika shughuli hii utafanya maamuzi 21 kati ya chaguo mbili. Mojawapo ya maamuzi haya inaweza chaguliwa kuwa ya malipo ,Kwa hivyo una paswa kuchagua kila uamuzi ni kama ndiyo itakayo amua malipo. Kwahivyo,ni vyema kwako kuchagua uamuzi unayo pendelea zaidi.

The first option is to draw a ball from a jar. The jar has two balls – a blue ball with number 2000 written on it and a red ball with number 0 written on it. If the blue ball is chosen, you will be paid KSH.2000, while if the red ball is chosen you will be paid KSH.0. The jar is the same in all 21 decisions you will make. If you decide to draw a ball from the jar, you will draw with 50-percent chance the blue ball and with the same 50-percent chance the red ball.

Chaguo la kwanza ni kuchukua mpira kutoka kwa Jar. Hiyo jar iko na mipira miwili- mpira wa blue iliyo andikwa nambari 2000 na mpira wa red iliyo andikwa 0. Ikiwa mpira wa blue utachaguliwa ,utalipwa KSH 2000, ikiwa mpira wa red utachaguliwa ,utalipwa KSH 0. Jar itakua ile moja kwa maamuzi yote 21. Ukiamua kuchukua mpira kutoka kwa jar, utakua na aslimia 50 ya nafasi kwa mpira wa blue, pia utakua na nafsi ya asilimia 50 kwa mpira wa red.

The second option is to get a certain amount of money for sure. The amount differs in each of the 21 decisions you will make.

Chaguo la pili ni kupata asilimia fulani ya pesa kwa hakika. Kiwango cha pesa kinatofautiana kwa kila moja wapo ya maamuzi 21 ambayo utafanya.

Please click 'Next' to continue.

Example 1, payoff 1

Let's take an example which is illustrated on the computer screen.

Wacha tuchukue mfano uliyo elezwa kwa skrini.

Imagine you can choose to receive the money based on drawing a ball from the jar and getting KSH.2000 or nothing, or to receive KSH.400 for sure.

Fikiria utapata pesa kulingana na mpira uliyo chagua kutoka kwa jar , kati ya kupata Ksh 2000 au kupata sufuri, au kupata shilingi KSH 400 Kwa hakika.

Now please write on the computer how much money you receive if you decide to draw a ball from the jar and the blue ball is drawn.

Sasa tafadhali andika kwa kompyuta ni pesa ngapi utapata iwapo uta amua kuchukua mpira kutoka kwa jar kisha mpira wa blue uchaguliwe.

Please click 'Next' to continue.

Example 1, payoff 2

Now please write on the computer how much money you receive if you decide to draw a ball from the jar and the red ball is drawn.

Sasa tafadhali andika kwa kompyuta ni pesa ngapi utapokea iwapo uta amua kuchukua mpira kutoka kwa jar kisha mpira wa red uchaguliwe.

Please click 'Next' to continue.

Example, blue-ball chance

Now if you choose to draw a ball from a jar, please select what is the chance the blue ball will be drawn?

- 1) *More likely to draw a blue ball than the red ball?*
- 2) *Equally likely to draw a blue ball and the red ball?*
- 3) *Less likely to draw a blue ball than the red ball?*

Sasa iwapo utachukua mpira katika jar, tafadhali chagua, mpira wa blue utakua na nafasi ya kiwango gani kuchaguliwa?

- 1) Uwezekano zaidi wa kudroo mpira wa bluu kuliko mpira mwekundu
- 2) Uwezekano sawa wa kudroo mpira wa bluu au mwekundu
- 3) Uwezekano mdogo wa kudroo mpira wa bluu kuliko mpira mwekundu

Please click 'Next' to continue.

Example 1, payoff 3

Now please write on the computer how much money you receive if you decide not to draw a ball from the jar and to receive the money for sure.

Sasa tafadhali andika kwa kompyuta ni pesa ngapi utapata iwapo utaamua kuto chagua mpira kwenye jar na kupokea malipo kwa hakika.

Please click 'Next' to continue.

Remember, there is no correct answer; what we are interested is your personal preference. Are there any questions? If you have a question while you complete the task, please raise your hand and we will assist you.

Kumbuka hakuna jibu lililo sahihi; tuna nia tu ya kujua mapendeleo yako ya kibinafsi. Je kuna swali lolote?

If you have a question while you complete the task, please raise your hand and we will assist you.

Iwapo una swali unapo kamilisha shughuli hizi, tafadhali inua mkono na tutakusaidia.

You will make 21 decisions in this task. In each decision, you will be making a choice between drawing a ball from a jar or receiving an amount for sure.

Utafanya maamuzi 21 kwa shughuli hii, kwa kila uamuzi, utafanya uchaguzi kati ya kudroo/kuteka mpira kutoka kwa jar au kupata kiasi cha pesa kwa hakika

The option with the jar is the same in all 21 decisions, but the option with the amount that you can get for sure differs.

Chaguo la jar ni sawa katika maamuzi yote 21, lakini chaguo lenye kiasi cha pesa ambazo wawezapata kwa hakika latofautiana.

Remember that one of these 21 decisions can be the one chosen for payment, so you should choose as if it determined your payment.

Kumbuka kwamba moja ya maamuzi haya 21 yaweza kuwa itakayo chaguliwa kwa malipo, kwa hivyo unafaa kuchagua kama ndio itakayo amua malipo yako.

Therefore, it is in your interest to carefully pick the option you truly prefer.

Kwa hivyo, ni kwa hiari yako kuchagua kwa makini chaguo unalopendelea.

Now please press "Next" to begin the task.

1. *What do you choose?*

- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.0 for sure.*

1. Utachagua nini?

- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 0 zenye unauhakika wa kupata.

2. *What do you choose?*

- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.100 for sure.*

2. Utachagua nini?

- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 100 zenye unauhakika wa kupata.

3. *What do you choose?*

- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.200 for sure.*

3. Utachagua nini?

- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 200 zenye unauhakika wa kupata.

4. *What do you choose?*

- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.300 for sure.*

4. Utachagua nini?

- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 300 zenye unauhakika wa kupata.

5. *What do you choose?*

- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.400 for sure.*
5. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 400 zenye unauhakika wa kupata.
6. *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.500 for sure.*
6. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 500 zenye unauhakika wa kupata.
7. *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.600 for sure.*
7. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 600 zenye unauhakika wa kupata.
8. *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.700 for sure.*
8. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 700 zenye unauhakika wa kupata.
9. *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.800 for sure.*
9. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 800 zenye unauhakika wa kupata.
10. *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.900 for sure.*

10. Utachagua nini?
- Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
 - Kiwango cha pesa shilingi 900 zenye unauhakika wa kupata.
- 11.** *What do you choose?*
- To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
 - To receive KSH.1000 for sure.*
11. Utachagua nini?
- Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
 - Kiwango cha pesa shilingi 1000 zenye unauhakika wa kupata.
- 12.** *What do you choose?*
- To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
 - To receive KSH.1100 for sure.*
12. Utachagua nini?
- Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
 - Kiwango cha pesa shilingi 1100 zenye unauhakika wa kupata.
- 13.** *What do you choose?*
- To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
 - To receive KSH.1200 for sure.*
13. Utachagua nini?
- Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
 - Kiwango cha pesa shilingi 1200 zenye unauhakika wa kupata.
- 14.** *What do you choose?*
- To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
 - To receive KSH.1300 for sure.*
14. Utachagua nini?
- Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
 - Kiwango cha pesa shilingi 1300 zenye unauhakika wa kupata.
- 15.** *What do you choose?*
- To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
 - To receive KSH.1400 for sure.*
15. Utachagua nini?
- Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.

- b. Kiwango cha pesa shilingi 1400 zenye unauhakika wa kupata.
- 16.** *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.1500 for sure.*
16. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 1500 zenye unauhakika wa kupata.
- 17.** *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.1600 for sure.*
17. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 1600 zenye unauhakika wa kupata.
- 18.** *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.1700 for sure.*
18. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 1700 zenye unauhakika wa kupata.
- 19.** *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.1800 for sure.*
19. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 1800 zenye unauhakika wa kupata.
- 20.** *What do you choose?*
- a. *To draw a ball from a jar and receive either KSH.2000 or KSH.0.*
- b. *To receive KSH.1900 for sure.*
20. Utachagua nini?
- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 1900 zenye unauhakika wa kupata.
- 21.** *What do you choose?*

- a. To draw a ball from a jar and receive either KSH.2000 or KSH.0.
- b. To receive KSH.2000 for sure.

21. Utachagua nini?

- a. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 2000 na pia uwezekano wa asilimia 50 kuambulia patupu.
- b. Kiwango cha pesa shilingi 2000 zenye unauhakika wa kupata.

Please click 'Next' to continue.

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Task 3 [AMBIGUITY AVERSION]

This is a new task. In this task, you are going to play a game where you draw a ball out of a jar without looking. We have two jars as illustrated with 10 balls each.

Hii ni shughuli mpya. Katika shughuli hii, utaenda kucheza mchezo ambapo utachukua mpira bila kuangalia. Tuko na jar mbili, kila moja na mipira 10.

In jar 1, out of 10 balls there are 4 green balls and 6 yellow balls. In jar 2, there are also 10 balls, but the number of green and yellow balls is unknown. You do not know how many balls in jar 2 are green and how many are yellow.

Katika jar ya 1, kati ya mipira 10, 4 ni mipira ya green, na 6 ya yellow. Katika jar ya 2, pia kuna mipira 10, lakini idadi ya mipira ya green na yellow haijulikani. Haujui ni mipira ngapi ya green na ya yellow iko kwa jar 2.

You can choose a jar from which you want to draw the ball. If you choose jar 1, to win KSH.1000 you need to draw a green ball. If you choose jar 1 and draw a yellow ball, you get KSH.0. If you choose jar 2, to win KSH.1000 you need to decide a color and draw a ball of that color. Otherwise you get KSH.0.

Unaweza kuchagua jar ambayo ungependa kuchukulia mpira. Ukichagua jar 1, ili kushinda KSH1000, utapaswa kuchukua mpira wa green. Ukichagua jar 1 na uchukue mpira wa yellow, utapata KSH 0. Unaweza kuchagua jar ambayo ungependa kuchukulia mpira. Ukichagua jar 2, ili kushinda KSH1000, utapaswa kuamua rangi na kuchagua mpira wa rangi hiyo. La sivyo, utapata KSH.0.

Please click 'Next' to continue.

Example 1, payoff

Imagine you choose Jar1 and you draw a green ball. How much do you win?

Fikiria umechagua jar1 na umedroo/kuteka mpira wa green. Unashinda kiasi gani?

Please click 'Next' to continue.

Example 2, payoff

Imagine you choose Jar1 and you draw a yellow ball. How much do you win?

Fikiria umechagua jar1 na umedroo/kuteka mpira wa yellow. Unashinda kiasi gani?

Please click 'Next' to continue.

Example 3, payoff

Imagine you choose Jar 2 and you choose color green and draw a green ball. How much do you win?

Fikiria umechagua jar2 na umechagua rangi ya green na kudroo/kuteka mpira wa green. Unashinda kiasi gani?

Please click 'Next' to continue.

Example 4, payoff

Imagine you choose Jar 2 and you choose color green and draw a yellow ball. How much do you win?

Fikiria umechagua jar2 na umechagua rangi ya green na kudroo/kuteka mpira wa yellow. Unashinda kiasi gani?

Please click 'Next' to continue.

Remember that this decision can be the one chosen for payment, so you should choose as if it determined your payment. Therefore, it is in your interest to carefully pick the option you truly prefer.

Kumbuka yakwamba uamuzi huu unaweza chaguliwa kwa malipo, kwa hivyo unapaswa kuchaguwa ni kama itakayo amua malipo yako. Kwa hivyo, ni muhimu uchague chaguo unalo pendelea Zaidi.

Please click 'Next' to continue.

Which jar do you want to draw the ball from?

- a) Jar 1 with 4 green balls and 6 yellow balls.
- b) Jar 2 with unknown number of green and yellow balls.

Ungependa kuchukua mpira kutoka kwa jar gani?

- a) Jar 1 iliyo na mipira 4 ya green na 6 ya yellow
- b) Jar 2 iliyo na mipira ya green na yellow ambayo idadi yake haijulikani.

Please click 'Next' to continue.

[For those choosing Jar 2:] Which color do you want to choose?

- a) Color Green
- b) Color Yellow

Je, unataka kuchagua rangi gani?

- a) Rangi ya Green
- b) Rangi ya yellow

Please click 'Next' to continue

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Task 4a [GENERALIZED ALTRUISM]

In this task, you receive KSH.1000 and you can decide how much of this amount you want to donate to a charity that helps people in Kenya. If this task is chosen for payment, you will receive the money you decide to keep for yourself and we will transfer your donation to a charity that helps people in Kenya. Therefore, it is in your interest to make your decision carefully.

Katika shughuli hii, utapokea Ksh1000 na unaweza amua ni kiwango gani cha pesa hii ambayo ungependelea kuchanga kwa shirika la msaada hapa Kenya. Iwapo shughuli hii itachaguliwa kwa malipo, utapokea pesa ulizo amua

kujibakishia na tutatuma mchango wako kwa shirika linalosaidia watu hapa Kenya. Kwahivyo, ni vyema kufanya uamuzi ukiwa makini.

Please click 'Next' to continue.

Remember, there is no correct answer; what we are interested is your personal preference. Are there any questions? If you have a question while you complete the task, please raise your hand and we will assist you.

Kumbuka, hakuna jibu lililo sahihi ; tuna nia tu ya kujua mapendeleo yako ya kibinafsi. Je kuna swali lolote? Iwapo una swali unapo kamilisha shughuli hizi, tafadhali inua mkono na tutakusaidia.

Please click 'Next' to continue.

How much of KSH.1000 you want to donate to a charity that helps people in Kenya? You can either keep this entire amount, or donate any amount between KSH.0 and KSH.1000.

Ni kiasi gani kwa Ksh 100 ungependa kuchangia kwa shirika la msaada hapa Kenya ambalo husaidia watu hapa Kenya. Unaweza baki na pesa yote, au kuchanga idadi yoyote ya pesa kati ya KSH 0 na KSH 1000.

Please click 'Next' to continue.

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Task 4b [IN-GROUP ALTRUISM]

In this task, you receive KSH.1000 and you can decide how much of this amount you want to donate to a charity that helps people in your ancestral home area.

Katika shughuli hii, utapokea KSH.1000 na unaweza amua ni kiwango gani cha pesa hii ambayo ungependelea kuchanga kwa shirika la msaada lililo kwenu asili ambalo husaidia watu.

If this task is chosen for payment, you will receive the money you decide to keep for yourself and we will transfer your donation to a charity that helps people in your ancestral home area.

Ikiwa shughuli hii itachaguliwa kwa malipo, utapokea pesa ulizo amua kujibakishia na tutatuma mchango wako kwa shirika la usaidizi ambalo lina saidia watu kutoka kwenu asili.

Please click 'Next' to continue.

How much of KSH.1000 you want to donate to a charity that helps people in your ancestral home area? You can either keep this entire amount, or donate any amount between KSH.0 and KSH.1000.

Ni pesa ngapi kati ya Ksh 1000 ungependa kuchanga kwa shirika la msaada lililo kwenu asili ambalo husaidia watu. Unaweza baki na pesa yote, au kuchanga idadi yoyote ya pesa kati ya KSH 0 na KSH 1000.

Please click 'Next' to continue.

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Task 4c [OUT-GROUP ALTRUISM]

In this task, you receive KSH.1000 and you can decide how much of this amount you want to donate to a charity that helps people from other parts of Kenya, other than your ancestral area.

Katika shughuli hii, utapokea Ksh 1000 na unaweza amua ni kiwango gani cha pesa hii ambayo ungependelea kuchanga kwa shirika la msaada kutoka sehemu zingine za Kenya kando na kwenu asili.

If this task is chosen for payment, you will receive the money you decide to keep for yourself and we will transfer your donation to a charity that helps people from other parts of Kenya, other than your ancestral home area.

Ikiwa shughuli hii itachaguliwa kwa malipo, utapokea pesa ulizo amua kujibakishia na tutatuma mchango wako kwa shirika la usaidizi ambalo lina saidia watu kutoka sehemu zingine za Kenya kando na kwenu asili.

Please click 'Next' to continue.

How much of KSH.1000 you want to donate to a charity that helps people from other parts of Kenya, other than your ancestral area? You can either keep this entire amount, or donate any amount between KSH.0 and KSH.1000.

Ni pesa ngapi kati ya Ksh 1000 ungependa kuchanga kwa shirika la msaada kutoka sehemu zingine za Kenya kando na kwenu asili ambalo husaidia watu. Unaweza baki na pesa yote, au kuchanga idadi yoyote ya pesa kati ya KSH 0 na KSH 1000.

Please click 'Next' to continue

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Task 5a [GENERALIZED ANTI-SOCIAL]

In this task, you are matched with a person from Kenya who is unknown to you. You as well as the other person received KSH.1000 each. You can decide between two options.

Katika shughuli hii, umeshirikishwa na mtu mwingine kutoka nchini Kenya ambaye haumfahamu/haumjui. Wewe pamoja na yule mtu mwingine mutapokea KSH 1000 kila mmoja. Unaweza amua kati ya chaguo mbili.

The first option is to keep KSH.1000 for you and KSH.1000 for that person. Chaguo la kwanza ni kujiwekea KSH1000 na KSH1000 ya yule mtu mwingine.

The second option is to lower the amount of money of that person by KSH.500, but this will cost you KSH.20. Thus you will receive KSH.980 and the other person will receive KSH.500.

Chaguo la pili ni kupunguza pesa ya yule mtu mwingine kwa KSH.500 lakini hii itakugarimu Ksh 20. Kwa hivyo, utapokea KSH.980 na yule mtu mwingine atapokea KSH.500.

The other person cannot lower your payment.

Yule mtu mwingine hawezi punguza pesa zako.

If this task is chosen for payment, your choice will determine the amount of money paid to you and the amount of money we will send to the other person. Therefore, it is in your interest to make your decision carefully.

Ikiwa shughuli hii itachaguliwa kwa malipo, chaguo lako lita adhiri pesa utakazo lipwa na pesa tutakazo tumia yule mtu mwingine. Kwahivyo, ni vyema kufanya uamuzi ukiwa makini.

Please click 'Next' to continue.

Example 1, payoff 1

Now please write on the computer how much money you receive and how much money the other person receives if you decide for the first option.

Sasa tafadhali andika kwa kompyuta ungependa kupokea pesa ngapi na ni ngapi ungependa yule mtu mwingine apokee iwapo utachagua chaguo la kwanza.

Please click 'Next' to continue.

Example 1, payoff 2

Now please write on the computer how much money you receive and how much money the other person receives if you decide for the second option.

Sasa tafadhali andika kwa kompyuta ungependa kupokea pesa ngapi na ni ngapi ungependa yule mtu mwingine apokee iwapo utachagua chaguo la pili.

Please click 'Next' to continue.

Remember, there is no correct answer; what we are interested is your personal preference. Are there any questions? If you have a question while you complete the task, please raise your hand and we will assist you.

Kumbuka hakuna jibu lililo sahihi ; tuna nia tu ya kujua mapendeleo yako ya kibinafsi. Je kuna swali lolote? Iwapo una swali unapo kamilisha shughuli hizi, tafadhali inua mkono na tutakusaidia.

Please click 'Next' to continue.

Which option do you choose?

Unachagua chaguo lipi?

- 1) *I receive KSH.1000 and the other person receives KSH.1000.*
- 2) *I receive KSH.980 and the other person receives KSH.500.*
- 1) Nipokee KSH.1000 Na yule mtu mwingine apokee KSH 1000
- 2) Nipokee KSH.980 na yule mtu mwingine apokee KSH.500

Please click 'Next' to continue.

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Task 5b [IN-GROUP ANTI-SOCIAL]

In this task, you are matched with a different person from Kenya who is unknown to you, but we can tell you the person is from your ancestral home area. You and the other person received KSH.1000 each. You can decide between two options.

Katika shughuli hii, umeshirikishwa na mtu mwingine kutoka nchini Kenya ambaye haumfahamu/haumjui, lakini tunaweza kueleza ametoka kwenu asili. Wewe pamoja na yule mtu mwingine mutapokea KSH 1000 kila mmoja. Unaweza amua kati ya chaguo mbili.

The first option is to keep KSH.1000 for you and KSH.1000 for the person from your ancestral home area.

Chaguo la kwanza ni kujiwekea KSH 1000 pamoja na KSH 1000 ya yule mtu wa kwenu asili.

The second option is to lower the amount of money of that person from your ancestral home area by KSH.500, but this will cost you KSH.20. Thus you will receive KSH.980 and the other person will receive KSH.500.

Chaguo la pili ni kupunguza pesa , kwa KSH.500 ya yule mtu wa kwenu asili lakini hii itafanya upoteze Ksh 20. Kwa hivyo, utapokea KSH.980 na yule mtu mwingine atapokea KSH.500.

The other person cannot lower your payment.

Yule mtu mwingine hawezi punguza pesa zako.

If this task is chosen for payment, your choice will determine the amount of money paid to you and the amount of money we will send to the other person. Therefore, it is in your interest to make your decision carefully.

Ikiwa shughuli hii itachaguliwa kwa malipo, chaguo lako lita adhiri pesa utakazo lipwa na pesa tutakazo tumia yule mtu mwingine. Hivyo, wewe binafsi, ni kwa hiari yako kufanya maamuzi yako kwa makini.

Are there any questions?

Je kuna swali lolote?

Please click 'Next' to continue.

Which option do you choose?

Unachagua chaguo lipi?

- 1) *I receive KSH.1000 and the person from my ancestral area receives KSH.1000.*
- 2) *I receive KSH.980 and the person from my ancestral home area receives KSH.500.*
- 1) Nipokee KSH.1000 na yule mtu mwingine kutoka kwetu asili apokee KSH 1000
- 2) Nipokee KSH.980 na yule mtu mwingine kutoka kwetu asili apokee KSH.500

Please click 'Next' to continue.

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Task 5c [OUT-GROUP ANTI-SOCIAL]

In this task, you are matched with yet another person from Kenya who is unknown to you, but we can tell you the person is not from your ancestral home area. The person comes from a different region. You and the other person received KSH.1000 each. You can decide between two options.

Katika shughuli hii, umeshirikishwa na mtu mwingine kutoka nchini Kenya ambaye haumfahamu/haumjui, lakini tunaweza kueleza anatoka sehemu zingine za Kenya kando na kwenu asili. Wewe pamoja na yule mtu mwingine mutapokea KSH 1000 kila mmoja. Unaweza amua kati ya chaguo mbili.

The first option is to keep KSH.1000 for you and KSH.1000 for the person from other parts of Kenya, other than your ancestral home area.

Chaguo la kwanza ni kujiwekea KSH 1000 pamoja na KSH 1000 ya yule mtu mwingine ambaye anatoka sehemu zingine za Kenya kando na kwenu asili.

The second option is to lower the amount of money of that person from other parts of Kenya, other than your ancestral home area by KSH.500, but this will cost you KSH.20. Thus you will receive KSH.980 and the other person will receive KSH.500.

Chaguo la pili ni kupunguza pesa ya yule mtu mwingine kwa KSH 500 lakini hii itafanya upoteze Ksh 20. Kwa hivyo, utapokea KSH 980 na yule mtu mwingine ambaye anatoka sehemu zingine za Kenya kando na kwenu asili atapokea KSH.500.

The other person cannot lower your payment.

Yule mtu mwingine hawezi punguza pesa zako.

If this task is chosen for payment, your choice will determine the amount of money paid to you and the amount of money we will send to the other person.

Ikiwa shughuli hii itachaguliwa kwa malipo, chaguo lako lita adhiri pesa utakazo lipwa na pesa tutakazo tumia yule mtu mwingine.

Are there any questions?

Je kuna swali lolote?

Please click 'Next' to continue.

Which option do you choose?

Unachagua chagu ipi?

- 1) *I receive KSH.1000 and the person from other parts of Kenya, other than my ancestral home area receives KSH.1000.*
- 2) *I receive KSH.980 and the person from Kenya, other than my ancestral home area receives KSH.500.*
- 1) Nipokee KSH.1000 na yule mtu mwingine kutoka sehemu zingine za Kenya kando na kwenu asili apokee KSH 1000
- 2) Nipokee KSH.980 na yule mtu mwingine kutoka sehemu zingine za Kenya kando na kwenu asili apokee KSH.500

Please click 'Next' to continue.

The results will be shown at the end of the session.

Matokeo yataonyeshwa mwisho wa kikao

Please click 'Next' to continue.

Task 6 [RECIPROCITY]

In this task, you receive KSH.1000 and you can decide how much of this amount you will give to two other people who also visited Busara and made some decisions a few days ago. We will call them Person A and Person B.

Katika shughuli hii, utapokea KSH.1000 na unaweza amua ni kiwango kipi cha hii pesa ambayo utapea watu wawili ambao pia walikua Busara na wakafanya maamuzi siku kadhaa zilizopita. Tutawaita Person A na Person B.

As a part of their reward, both Person A and Person B received two bags of sugar. We told them that more people would come to Busara in the following days and that if they wanted to, they could give one of the two bags of sugar to one of them, in order to please them. Thus, Person A and Person B could either take both bags of sugar or leave one here for somebody else.

Kama njia ya kuwa toza, person A na person B walipokea mifuko mbili ya sukari. Tuliwaeleza yakwamba watu zaidi watakuja Busara siku zinazo fuata na iwapo wangetaka, wangepeana mojawapo ya mifuko hiyo mbili ya sukari kwa mmoja wao ili kuwafurahisha. Kwa hivyo, Person A na Person B waliweza kuchukua mifuko yote miwili ya sukari au kuwacha moja kwa mtu mwingine.

Person A decided to give a bag, whereas Person B decided to keep both bags for self and not to give any sugar.

Person A aliamua kupeana mfuko, na Person B akaamua kujiwekea mifuko yote miwili bila kupeana sukari yoyote.

Now you can decide how much money out of KSH.1000 that you received you want to send to Person A and how much money you want to send to Person B. You can either keep the whole KSH.1000, or give any amount to Person A and Person B.

Person A aliamua kupeana mfuko, na Person B akaamua kujiwekea mifuko yote miwili bila kupeana sukari yoyote.

Sasa unaweza amua ni pesa ngapi katika KSH.1000 uliyopokea ungetaka kumtumia Person A na ni pesa ngapi ungependa kumtumia Person B. Unaweza kujiwekea pesa yote KSH.1000, ama kupeana idadi yoyote kwa Person A na Person B.

Please click 'Next' to continue.

If this task is chosen for payment, you will receive the money you decide to keep for yourself and the bag of sugar from Person A. The money that you allocate for Person A and Person B will be sent to them by M-PESA.

Iwapo shughuli hii itachaguliwa kwa malipo, utapokea pesa uliyo amua kujiwekea pamoja na mfuko wa sukari kutoka kwa Person A. Pesa ile utapea Person A na Person B itatumwa kwao kupitia M-Pesa.

Remember, there is no correct answer; what we are interested is your personal preference. Are there any questions? If you have a question while you complete the task, please raise your hand and we will assist you.

Kumbuka , hakuna jibu sahihi , tuna nia ya kujua mapendeleo yako ya kibinafsi. Kuna maswali yoyote? Ukiwa na swali wakati wa kukamilisha shughuli, tafadhali inua mkono wako na tutakusaidia.

Please click 'Next' to continue.

How much of KSH.1000 you want to give to Person A who decided to give a bag of sugar?

Ni pesa ngapi kutoka kwa KSH. 1000 ungetaka kumpea Person A aliye amua kupeana mfuko wa sukari.

How much of KSH.1000 you want to give to Person B who decided not to give anything and keep both bags of sugar for self?

Ni pesa ngapi kutoka kwa KSH. 1000 ungetaka kumpea Person B aliye amua kutopeana chochote na kujiwekea mifuko yote miwili ya sukari?

Please click 'Next' to continue.

The results will be shown at the end of the session.

Utaonyeshwa matokeo katika mwisho wa shughuli hii.

Please click 'Next' to continue.

Memory measure

[Week 1]

We are done with all the tasks. Now, we would like to ask you one more question. On the next screen you will see ten letters from the alphabet for 20 seconds. Please try to remember as many of them as possible. Then you will be asked to write them down.

Tumemaliza shughuli zote.Sasa, tungependa kukuuliza swali moja zaidi. Kwa skreeni ifuatayo,utaona herufi kumi kutoka kwa alfabeti kwa sekunde 20. Tafadhali jaribu kumbuka nyingi uwezavyo, kisha tutakuuliza kuziandika chini

Please click 'Next' to continue.

N R O X S L P W A C

[displays the text for 20 seconds, then the next screen appears:]

Please write as many of the letters you just saw on the screen. You can write up to ten letters.

Tafathali andika herufi nyingi uwezavyo ulizoziona kwa skreen.

Please click 'Next' to continue.

[Week 2]

We are done with all the tasks. Now, we would like to ask you one more question. Please write down the letters from the alphabet you saw at the end of your visit here last week on the computer screen. You can write up to ten letters.

Tumemaliza shughuli zote, Sasa, tungependa kukuuliza swali moja zaidi. Tafathali andika herufi kutoka kwa alfabeti ulizoona kwa computer wakati wa mwisho ulipokuja wiki iliyopita. Waweza kuandika hadi herufi kumi.

Please click 'Next' to continue.

Demographics

What is your year of birth?

Ulizaliwa mwaka gani?

Please click 'Next' to continue.

What is your gender?

- A. *Male*
- B. *Female*

Wewe ni wa jinsia gani?

- A. *Mume*
- B. *Mke*

Please click 'Next' to continue.

What is the highest level of education you have completed?

[Std 8, Form 1, Form 2, Form 3, Form 4, Form 5, Form 6, College Year 1, College Year 2, College Year 3, College Year 4, University Year 1, University Year 2, University Year 3, University Year 4, Polytechnic, Postgraduate study]

Ni kiwango gani cha juu cha masono umekamilisha?

[Std 8, Form 1, Form 2, Form 3, Form 4, Form 5, Form 6, College Year 1, College Year 2, College Year 3, College Year 4, University Year 1, University Year 2, University Year 3, University Year 4, Polytechnic, Postgraduate study]

Please click 'Next' to continue.

What is your marital status?

- 1) *Single*
- 2) *Married*
- 3) *Divorced/Separated*
- 4) *Widowed*

Hali yako ya ndoa ni gani?

- 1) Sijaolewa
- 2) Umeolewa
- 3) Kujitenga
- 4) Mjane

Please click 'Next' to continue.

How many biological children do you have?

Uko na watoto wangapi wa kibiolojia?

Please click 'Next' to continue.

What is your mother tongue?

[Kikuyu, Luo, Luhya, Kisii, Kamba, Meru, Embu, Taita, Mbeere, Turkana, Maasai, Kalenjin, Pokomo, Boran, Mijikenda, Rendile, Taveta, Taita, Giriama, Pokot, Samburu, Nubian, Other (Specify)]

Lugha yako ya mama ni gani?

[Kikuyu, Luo, Luhya, Kisii, Kamba, Meru, Embu, Taita, Mbeere, Turkana, Maasai, Kalenjin, Pokomo, Boran, Mijikenda, Rendile, Taveta, Taita, Giriama, Pokot, Samburu, Nubian, Other (Specify)]

Please click 'Next' to continue.

Thank you for participating in this study. Remember that the answers you gave are completely confidential and will not be shared with anyone outside the research team in individualized form.

Asante kwa kushiriki katika utafiti huu. Kumbuka kwamba majibu uliyotoa ni ya siri kabisa na haytashirikiwa na mtu yeyote aliye nje ya timu ya utafiti katika fomu ya kibinafsi.

You will get paid KSH.200 for your participation and transport today, plus an additional KSH.50 if you arrived on time, plus the payment depending on your decision in the task which has been picked by the computer to determine your payment.

Utalipwa Ksh 200 kwa kushiriki kwako na nauli leo, pamoja na bonus ya Ksh 50 ikiwa ulifika mapema, pamoja na malipo kulingana na uamuzi ulioamuliwa na Kompyuta.

On the next screen, you will see your earning from one the the task that has been randomly chosen by the computer.

Katika skrini ifuatayo, utaona mapato yako kutoka na shughuli moja ambayo imechaguliwa na komputa.

Please click 'Next' to continue.

The computer randomly picked {{ picked_task }} as your paying task.

Komputa imechagua shughuli {{ picked_task }} kama shughuli ya ulipaji.

Therefore, your earnings from this session are {{ payoff }}.

Kwa hivyo, umepata {{ payoff }}

The session has finished. Please pack up your things now and join me. Wait in the waiting room until we pay you. Please give me the visitor pass and the place card on the way out. Thank you very much!

Utafiti umekamilika. Tafadhali, kusanya vitu vyako sasa kisha uje. Subiri katika chumba cha kungoja hadi tutakapo kulipa. Tafadhali nipee kadi ya nambari unapo ondoka. Asante sana.

APPENDIX D

Survey protocol

[Understanding this protocol: Text in brackets indicates instructions to the experimenter. Other text specifies instructions to the participants (to be read out).]

We will now begin with the tasks. At any time, if you don't understand any of the tasks that you are required to do, please raise your hand and you will be assisted. You all know that you will receive KSH.200 for coming to the study today, plus a bonus of KSH.50 if you have arrived on time, plus the payment of 200 shillings for your time.

Sasa tutaanza shughuli. Kwa wakati wowote utakapokuwa haelewi vile unavyo paswa kufanya shughuli, tafadhali inua mkono wako juu na uta saidiwa. Nyote mwajua yakua mutapokea KSH 200 kwa kushiriki kwa utafiti huu leo , na bonus ya KSH 50 iwapo ulifika mapema, pamoja na malipo ya shilingi 200 kwa wakati wako.

Nobody in the room will be able to see your decisions and answers. When you make decisions and provide answers, I will stand aside. Also note that there are dividers in the room, so that you can make choices in complete privacy. You will have enough time to make choices and provide answers. We are not in a hurry, so please take your time to make each of your choices carefully.

Hakuna mtu katika chumba hiki ataona maamuzi na majibu yako. Unapofanya na kutoa majibu, nitasimama kando. Pia kumbuka kuwa tuna kigawaji kwa chumba, ili ufanye maamuzi kwa siri kabisa. Utakuwa na mda wa kutosha kufanya maamuzi na kuweka majibu. Hatuna haraka, tafadhali chukua muda wako kufanya kila moja ya maamuzi yako kwa makini.

Please click 'Next' to continue

1. Risk preference (qualitative measure)

Please tell me, in general, how willing or unwilling you are to take risks. Let me explain what I mean by risk. Imagine you are going to start a business. You are going to take risk because you do not know if the business will succeed or if it will fail. Please use a scale from 0 to 10, where 0 means "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use any numbers between 0 and 10 to indicate where you fall on the scale, like 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

Tafadhali nieleze, kwa ujumla, uko na nia kiasi kipi cha kuchukua tahadhari. Wacha niwaeleze ninachomaanisha na tahadhari. Fikiria unaenda kuanzisha biashara. Unaenda kupata hatari kwa sababu haujui kama biashara itafanikiwa ama itafeli. Tafadhali tumia mizani ya 0 hadi 10, Ambapo 0 inamaanisha "kutokuwa na nia ya kuchukua tahadhari kabisa" na 10 inamaanisha "kuwa na nia ya kuchukua tahadhari". Unaweza pia kutumia nambari yoyote kati ya 0 na 10 kuashiria unapofikia katika mizano, ukitumia 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, au 10.

[Ask the respondent the following questions to make sure they understand the scale. If not, please explain the scale again. If you answer 0, what does that mean? If you answer 5, what does that mean? If you answer 10, what does that mean?]

Now, please tell me, in general, how willing or unwilling you are to take risks.

Sasa, tafadhali nieleze, kwa jumla uko na nia ama hauna nia ya kuchukua tahadhari.

Please click 'Next' to continue

We now ask you for your willingness to act in a certain way. Please again indicate your answer on a scale from 0 to 10. A 0 means "completely unwilling to do so," and a 10 means "very willing to do so." You can also use any number between 0 and 10 to indicate where you fall on the scale, using 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10.

Sasa tunakuuliza nia yako kutenda mambo kwa njia fulani. Tafadhali onyesha jibu lako katika mizani ya 0 hadi 10. 0 inamaanisha "kutokuwa na nia ya kufanya hivyo hata kidogo" na 10 inamaanisha "kuwa na nia ya kufanya hivyo"

Unaweza pia kutumia nambari yoyote kati ya 0 na 10 kuashiria unapofikia katika mizani, ukitumia 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, au 10.

Please press 'Next' to continue

2. Time discounting (qualitative measure)

How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?

Una nia kiasi gani kukiwacha kitu cha manufaa kwako leo, ili ufaidike zaidi kutokana nacho katika siku za usoni?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

3. Altruism (qualitative measures)

A. *How willing are you to give to a charity without expecting anything in return?*

Una nia kiasi gani kutoa ili kusaidia shirika la msaada, bila ya kutarajia malipo?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

B. *How willing are you to give to a charity that helps people in your ancestral home area without expecting anything in return?*

Ni jinsi gani uko tayari kupeana msaada inayosaidia watu wa kwenu asili bila kutarajia chochote?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

C. *How willing are you to give to a charity that helps people from other parts of Kenya, but not in your ancestral home area, without expecting anything in return?*

Ni jinsi gani uko tayari kupeana msaada inayosaidia watu kutoka sehemu zingine za Kenya kando na kwenu asili, bila kutarajia chochote?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

D. *Are you a person who is generally willing to share with others without expecting something in return, or are you not willing to do so?*

Je wewe ni mtu ambaye kwa ujumla huwa tayari kugawa na wengine bila kutarajia kitu Fulani au hauko tayari kufanya hivyo?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

E. *Are you a person who is generally willing to share with others from your ancestral home area without expecting something in return, or are you not willing to do so?*

Je, wewe ni mtu ambaye kwa ujumla huwa tayari kugawa na wengine kutoka kwenu asili bila kutarajia kitu Fulani au kauko tayari kufanya hivyo?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

F. *Are you a person who is generally willing to share with people from other parts of Kenya other than your ancestral home area without expecting something in return, or are you not willing to do so?*

Je wewe ni mtu ambaye kwa ujumla huwa tayari kugawa na watu kutoka sehemu zingine za Kenya, kando na kwenu asili bila kutarajia kitu Fulani, au hauko tayari kufanya hivyo?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

4. Anti-social preferences (qualitative measures)

A. *How willing or unwilling are you to cause troubles to other people?*

Ni jinsi gani uko takari au hauko tayari kuumiza au kuleta shida kwa watu wengine?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

B. *How willing or unwilling are you to cause troubles to people from your ancestral home area?*

Ni jinsi gani uko tayari au hauko tayari kuumiza au kuleta shida kwa watu wa kwenu asili?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press 'Next' to continue

C. *How willing or unwilling are you to cause troubles to people from other parts of Kenya, other than your ancestral home area?*

Ni jinsi gani uko tayari au hauko tayari kuumiza au kuleta shida kwa watu kutoka sehemu zingine za Kenya kando na kwenu asili?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press next to continue

D. *How willing or unwilling are you to make harm to other people?*

Je, uko tayari au hauko tayari kufanya madhara kwa watu wengine?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press next to continue

E. *How willing or unwilling are you to make harm to people from your ancestral home area?*

Je, uko tayari au hauko tayari kufanya madhara kwa watu wa kwenu asili?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press next to continue

F. *How willing or unwilling are you to make harm to people from other parts of Kenya other than your ancestral home area?*

Je, uko tayari au hauko tayari kufanya madhara kwa watu kutoka sehemu zingine za Kenya kando na kwenu asili?

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press next to continue

5. Reciprocity (qualitative measure)

How well does the following statement describe you as a person? Please indicate your answer on a scale from 0 to 10. A 0 means "does not describe me at all" and a 10 means "describes me perfectly". You can also use any numbers between 0 and 10 to indicate where you fall on the scale, like 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

Je, kila mojawapo ya kauli zifuatazo zinakuelezea kwa uzuri kiasi gani, wewe kama mtu binafsi? Tafadhali onyesha jibu lako katika mizani ya 0 hadi 10. 0 Inamaanisha “haielezi kunihusu hata kidogo” na 10 inamaanisha inaeleza kunihusu kwa njia muafaka zaidi. Unaweza pia kutumia nambari yoyote kati ya 0 na 10 kuashiria unapoangukia katika mizani, ukitumia 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, au 10.

When someone does me a favor I am willing to return it.

Mtu anaponitendea wema, niko tayari kurudisha fadhila.

[0=completely unwilling, 1, 2,3,4,5,6,7,8,9, 10=very willing, 99=DK]

Please press next to continue.

6. Risk preference (quantitative measure)

Please imagine the following situation: You can choose between a sure payment of a particular amount of money, or a draw, where you would have an equal chance of getting 900 shillings or getting nothing. We will present to you five different situations.

Tafadhali zitafakari hali zifuatazo: waweza ukachagua kati ya malipo ya uhakika ya kiwango Fulani cha pesa AU droo ambayo una nafasi sawa ya kupata shilingi 900 au uambulie patupu. Tutakupatia hali tano tofauti.

Please click 'Next' to continue.

6.1. (Q74) *What would you prefer: A draw with a 50-percent chance of receiving KSH. 900 and the same 50-percent chance of receiving nothing, OR the amount of KSH. 480 as a sure payment?*

- 1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q90)*
- 2. Sure payment of KSH. 480 (Continue)*

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha shilingi 480 pesa zenye uhakika?

- 1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 90)*
- 2. Kiwango cha shilingi 480 pesa zenye uhakika (Endelea)*

Please click 'Next' to continue

6.2. (Q75) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 240 Ksh as a sure payment?*

- 1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q83)*
- 2. Sure payment of KSH. 240 (Continue)*

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 240 zenye unauhakika wa kupata?

- 1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 83)*
- 2. Kiwango cha shilingi 240 pesa zenye uhakika (Endelea)*

Please click 'Next' to continue

6.3. (Q76) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 120 Khs as a sure payment?*

- 1. 50/50 chance of receiving KSH. 900 or nothing (Continue)*

2. *Sure payment of KSH. 120 (Skip to Q80)*

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 120 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Endelea)
2. Kiwango cha shilingi 120 pesa zenye uhakika (Ruka hadi Swali 80)

Please click 'Next' to continue

6.4. (Q77) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 180 Ksh as a sure payment?*

1. *50/50 chance of receiving KSH. 900 or nothing (Continue)*
2. *Sure payment of KSH. 180 (Skip to Q79)*

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 180 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Endelea)
2. Kiwango cha shilingi 180 pesa zenye uhakika (Ruka hadi Swali 79)

Please click 'Next' to continue

6.5. (Q78) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 210 Ksh as a sure payment?*

1. *50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)*
2. *Sure payment of KSH. 210 (Skip to Q7)*

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 210 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 210 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.6. (Q79) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 150 Ksh as a sure payment?*

1. *50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)*
2. *Sure payment of KSH. 150 (Skip to Q7)*

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 150 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 150 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.7. (Q80) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 60 Ksh as a sure payment?*

1. *50/50 chance of receiving KSH. 900 or nothing (Continue)*
2. *Sure payment of KSH. 60 (Skip to Q82)*

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 60 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Endelea)
2. Kiwango cha shilingi 60 pesa zenye uhakika (Ruka hadi Swali 82)

Please click 'Next' to continue

6.8. (Q81) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 90 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 90 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 90 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 90 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.9. (Q82) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 30 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 30 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 30 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 30 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.10. (Q83) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 360 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q87)
2. Sure payment of KSH. 360 (Continue)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 360 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 87)
2. Kiwango cha shilingi 360 pesa zenye uhakika (Endelea)

Please click 'Next' to continue

6.11. (Q84) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 300 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q86)
2. Sure payment of KSH. 300 (Continue)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 300 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 86)
2. Kiwango cha shilingi 300 pesa zenye uhakika (Endelea)

Please click 'Next' to continue

6.12. (Q85) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 270 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 270 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 270 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 270 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.13. (Q86) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 330 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 330 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 330 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 330 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.14. (Q87) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 420 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Continue)
2. Sure payment of KSH. 420 (Skip to Q89)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 420 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Endelea)
2. Kiwango cha shilingi 420 pesa zenye uhakika (Ruka hadi Swali 89)

Please click 'Next' to continue

6.15. (Q88) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 450 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 450 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 450 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 450 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.16. (Q89) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 390 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 390 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 390 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 390 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.17. (Q90) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 720 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q98)
2. Sure payment of KSH. 720 (Continue)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 720 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 98)
2. Kiwango cha shilingi 720 pesa zenye uhakika (Endela)

Please click 'Next' to continue

6.18. (Q91) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 600 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q95)
2. Sure payment of KSH. 600 (Continue)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 600 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 95)
2. Kiwango cha shilingi 600 pesa zenye uhakika (Endela)

Please click 'Next' to continue

6.19. (Q92) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 540 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Continue)
2. Sure payment of KSH. 540 (Skip to Q94)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 540 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Endelea)
2. Kiwango cha shilingi 540 pesa zenye uhakika (Ruka hadi Swali 94)

Please click 'Next' to continue

6.20. (Q93) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 570 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing, (Skip to Q7)
2. Sure payment of KSH. 570 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 570 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 570 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.21. (Q94) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 510 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 510 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 510 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 510 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.22. (Q95) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 660 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Continue)
2. Sure payment of KSH. 660 (Skip to Q97)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 660 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Endelea)
2. Kiwango cha shilingi 660 pesa zenye uhakika (Ruka hadi Swali 97)

Please click 'Next' to continue

6.23. (Q96) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 690 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 690 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 690 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 690 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.24. (Q97) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 630 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 630 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 630 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 630 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.25. (Q98) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 840 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q102)
2. Sure payment of KSH. 840 (Continue)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 840 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 102)
2. Kiwango cha shilingi 840 pesa zenye uhakika (Endelea)

Please click 'Next' to continue

6.26. (Q99) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 780 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Continue)
2. Sure payment of KSH. 780 (Skip to Q101)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 780 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Endelea)
2. Kiwango cha shilingi 780 pesa zenye uhakika (Ruka hadi Swali 101)

Please click 'Next' to continue

6.27. (Q100) *What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 810 Ksh as a sure payment?*

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 810 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 810 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 810 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.28. (Q101) What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 750 Ksh as a sure payment?

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 750 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 750 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 750 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.29. (Q102) What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 900 Ksh as a sure payment?

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q104)
2. Sure payment of KSH. 900 (Continue)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 900 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 104)
2. Kiwango cha shilingi 900 pesa zenye uhakika (Endelea)

Please click 'Next' to continue

6.30. (Q103) What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 870 Ksh as a sure payment?

1. 50/50 chance of receiving KSH. 900 or nothing (Skip to Q7)
2. Sure payment of KSH. 870 (Skip to Q7)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 870 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Ruka hadi Swali 7)
2. Kiwango cha shilingi 870 pesa zenye uhakika (Ruka hadi Swali 7)

Please click 'Next' to continue

6.31. (Q104) What would you prefer: A draw with a 50-percent chance of receiving 900 Ksh and the same 50-percent chance of receiving nothing, OR the amount of 930 Ksh as a sure payment?

1. 50/50 chance of receiving KSH. 900 or nothing (Continue)
2. Sure payment of KSH. 930 (Continue)

Ungependelea nini: Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu, au kiwango cha pesa shilingi 930 zenye unauhakika wa kupata?

1. Droo yenye nafasi ya asilimia 50 kujishindia shilingi 900 na pia uwezekano wa asilimia 50 kuambulia patupu (Endelea)
2. Kiwango cha shilingi 930 pesa zenye uhakika (Endelea)

Please click 'Next' to continue

7. Anti-social preferences (quantitative measures)

Imagine the following situation: Today you and another unknown person unexpectedly received an opportunity to get 3,200 shillings each. You can decide between the following two options.

Fikiria hali ifuatayo: Leo wewe na mtu mwingine asiyojulikana, kwa kutotarajia mlipata nafasi ya kupata shilingi 3,200 kila mmoja. Unaeza amua ni gani kati ya hizi mbili.

Please click 'Next' to continue

A. *What would you prefer: Each of you gets 3,200 shillings, OR you get 3,150 shillings and the other person gets 1,600 shillings?*

- 1) *Each gets 3,200 shillings*
- 2) *You get 3,150 shillings and the other person gets 1,600 shillings*

Ungependelea gani: Kila mmoja wenu apate shilingi 3,200 au upate shilingi 3,150 na yule mtu mwingine apate shilingi 1,600?

- 1) Kila mmoja wenu apate shilingi 3,200
- 2) Upate shilingi 3,150 na yule mtu mwingine apate shilingi 1,600

Please click 'Next' to continue

B. *Now, imagine that you know that the other person is from your ancestral home area. What would you prefer: Each of you gets 3,200 shillings, OR you get 3,150 shillings and the other person gets 1,600 shillings?*

- 1) *Each gets 3,200 shillings*
- 2) *You get 3,150 shillings and the other person gets 1,600 shillings*

Sasa fikiria kwamba unajua kwa mtu mwingine huyu anatoka kwenu asili. Ungependelea gani: Kila mmoja wenu anapata shilingi 3,200 au upate shilingi 3,150 na yule mtu mwingine apate shilingi 1,600?

- 1) Kila mmoja wenu apate shilingi 3,200
- 2) Upate shilingi 3,150 na yule mtu mwingine apate shilingi 1,600

Please click 'Next' to continue

C. *Now, imagine instead that you know that the other person is from other parts of Kenya, other than your ancestral home area. What would you prefer: Each of you gets 3,200 shillings, OR you get 3,150 shillings and the other person gets 1,600 shillings?*

- 1) *Each gets 3,200 shillings*
- 2) *You get 3,150 shillings and the other person gets 1,600 shillings*

Sasa, fikiria kwamba badala yake mtu mwingine huyu anatoka sehemu zingine za Kenya kando na kwenu asili. Ungependelea gani: Kila mmoja wenu anapata shilingi 3,200 au upate shilingi 3,150 na yule mtu mwingine apate shilingi 1,600?

- 1) Kila mmoja wenu apate shilingi 3,200
- 2) Upate shilingi 3,150 na yule mtu mwingine apate shilingi 1,600

Please click 'Next' to continue

8. Reciprocity (quantitative measure)

Please think about what you would do in the following situation. You are in a city you are not familiar with, and you realize you lost your way. You ask a stranger for directions. The stranger offers to walk with you and show you the way to your destination. By helping you the stranger misses an hour of work and thus loses 50 shillings in total. However, the stranger says he or she does not want any money from you. When you arrive to your destination, you can buy a gift for the stranger in a shop.

Tafadhali fikiria kuhusu kile ungefanya kwa hali ifuatayo. Uko katika jiji ambalo haulielewi na ukagundua umepotea. Unauliza mtu usiyemfahamu njia. Huyu mtu usiyemfahamu anajitolea kutembea na wewe na kukuonyesha njia ya mahali uendako. Kwa kukusaidia, huyu mtu usiyemfahamu anakosa kazini kwa lisaa limoja na anapoteza shilingi 50 kwa jumla. Hata hivyo huyu mtu usiyemfahamu anasema yeye hahitaji pesa yoyote kutoka kwako. Unapofika mahali uendapo unaweza mnunulia huyu mtu usiyemfahamu zawadi kwa duka.

Do you buy a "thank-you"- gift for the stranger?

- 1) Yes
- 2) No

Je, unamnunulia zawadi ya shukrani mtu huyu usiyemfahamu?

- 1) Ndio
- 2) Apana

Please click 'Next' to continue

A. [If yes, ask:] How much money will you spend on the present?

Je, utatumia pesa ngapi kununua hiyo zawadi?

[If No:] Have a screen that says please wait

Please click 'Next' to continue

9. Altruism (quantitative measure)

Imagine the following situation: Today you unexpectedly received 3,200 shillings.

Fikiria hali ifuatayo: Leo wewe kwa kutotarajia umepata shilingi 3,200.

A. How much of this amount would you donate to a charity?

Kiasi gani cha pesa hizi ungetoa kwa shirika la msaada?

[Values between 0 and 3,200 are allowed.]

Please click 'Next' to continue

B. How much of this amount would you donate to a charity, if you knew it was a charity helping people in your ancestral home?

Ni kiasi gani cha pesa hizi ungepeana kwa shirika la msaada, ikiwa ungejua ulikuwa msaada unaosaidia watu wa kwenyu asili?

[Values between 0 and 3,200 are allowed.]

Please click 'Next' to continue

C. How much of this amount would you donate to a charity, if you knew it was a charity helping people from other parts of Kenya, other than your ancestral home area?

Ni kiasi gani cha pesa hizi ungepeana kwa shirika la msaada, ikiwa ungejua ulikuwa msaada unaosaidia watu wa kutoka sehemu zingine za Kenya kando na kwenu asili?

[Values between 0 and 3,200 are allowed.]

Please click 'Next' to continue

10. Time discounting (quantitative measure)

Suppose you were given the choice between receiving a payment today or a payment in 12 months. We will now present to you five situations. The payment today is the same in each of these situations. The payment in 12 months is different in every situation. For each of these situations we would like to know which you would choose. Please assume there is no inflation, i.e. future prices are the same as today's prices.

Chukulia kuwa umepewa chaguo kati ya kupokea malipo leo au malipo katika miezi 12. Sasa tutakupatia hali tano. Malipo leo ni sawa katika kila moja ya hali hizi. Malipo katika miezi 12 ni tofauti katika kila moja ya hali hizi. Kwa kila moja ya hali hizi, tungependa kujua ile ungechagua. Tafadhali chukulia kuwa hakuna mfumuko wa bei za bidhaa yaani besi za siku zijazo ni sawa na za leo.

Please click 'Next' to continue.

10.1. (Q107) *Would you rather receive 300 shillings today or 461 shillings in 12 months?*

1. *KSH. 300 today (Skip to Q123)*
2. *KSH. 461 in 12 months (Continue)*

Je, ungependelea upokee 300 leo au 461 katika miezi 12?

1. *KSH. 300 leo (Ruka hadi Swali 123)*
2. *KSH. 461 baada ya miezi 12 (Endela)*

Please click 'Next' to continue.

10.2. (Q108) *Would you rather receive 300 shillings today or 376 shillings in 12 months?*

1. *KSH. 300 today (Skip to Q116)*
2. *KSH. 376 in 12 months (Continue)*

Je, ungependelea upokee 300 leo au 376 baada ya miezi 12?

1. *KSH. 300 leo (Ruka hadi Swali 116)*
2. *KSH. 376 baada ya miezi 12 (Endelea)*

Please click 'Next' to continue.

10.3. (Q109) *Would you rather receive 300 shillings today or 337 shillings in 12 months?*

1. *KSH. 300 today (Skip to 113)*
2. *KSH. 337 in 12 months (Continue)*

Je, ungependelea upokee 300 leo au 337 baada ya miezi 12?

1. *KSH. 300 leo (Ruka hadi Swali 113)*
2. *KSH. 337 baada ya miezi 12 (Endelea)*

Please click 'Next' to continue.

10.4. (Q110) *Would you rather receive 300 shillings today or 318 shillings in 12 months?*

1. *KSH. 300 today (Skip to Q112)*
2. *KSH. 318 in 12 months (Continue)*

Je, ungependelea upokee 300 leo au 318 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 112)
2. KSH. 318 baada ya miezi 12 (Endelea)

Please click 'Next' to continue.

10.5. (Q111) *Would you rather receive 300 shillings today or 309 shillings in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 309 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 309 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 309 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.6. (Q112) *Would you rather receive 300 shillings today or 328 shillings in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 328 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 328 baada ya miezi 12?

3. KSH. 300 leo (Ruka hadi Swali 11)
4. KSH. 328 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.7. (Q113) *Would you rather receive 300 shillings today or 356 shillings in 12 months?*

1. KSH. 300 today (Continue)
2. KSH. 356 in 12 months (Skip to Q115)

Je, ungependelea upokee 300 leo au 356 baada ya miezi 12?

1. KSH. 300 leo (Endelea)
2. KSH. 356 baada ya miezi 12 (Ruka hadi Swali 115)

Please click 'Next' to continue.

10.8. (Q114) *Would you rather receive 300 shillings today or 366 shillings in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 366 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 366 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 366 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.9. (Q115) *Would you rather receive 300 shillings today or 347 shillings in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 347 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 347 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)

2. KSH. 347 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.10. (Q116) *Would you rather receive 300 shillings today or 418 shillings in 12 months?*

1. KSH. 300 today (Skip to Q120)
2. KSH. 418 in 12 months (Continue)

Je, ungependelea upokee 300 leo au 418 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 120)
2. KSH. 418 baada ya miezi 12 (Endelea)

Please click 'Next' to continue.

10.11. (Q117) *Would you rather receive 300 shillings today or 397 shillings in 12 months?*

1. KSH. 300 today (Skip to Q119)
2. KSH. 397 in 12 months (Continue)

Je, ungependelea upokee 300 leo au 397 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 119)
2. KSH. 397 baada ya miezi 12 (Endelea)

Please click 'Next' to continue.

10.12. (Q118) *Would you rather receive 300 shillings today or 386 shillings in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 386 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 386 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 386 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.13. (Q119) *Would you rather receive 300 shillings today or 407 shillings in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 407 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 407 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 407 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.14. (Q120) *Would you rather receive 300 shillings today or 439 shillings in 12 months?*

1. KSH. 300 today (Skip to Q122)
2. KSH. 439 in 12 months (Continue)

Je, ungependelea upokee 300 leo au 439 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 122)
2. KSH. 439 baada ya miezi 12 (Endelea)

Please click 'Next' to continue.

10.15. (Q121) *Would you rather receive 300 shillings today or 428 shillings in 12 months?*

1. *KSH. 300 today (Skip to Q11)*
2. *KSH. 428 in 12 months (Skip to Q11)*

Je, ungependelea upokee 300 leo au 428 baada ya miezi 12?

1. *KSH. 300 leo (Ruka hadi Swali 11)*
2. *KSH. 428 baada ya miezi 12 (Ruka hadi Swali 11)*

Please click 'Next' to continue.

10.16. (Q122) *Would you rather receive 300 shillings today or 450 shillings in 12 months?*

1. *KSH. 300 today (Skip to Q11)*
2. *KSH. 450 in 12 months (Skip to Q11)*

Je, ungependelea upokee 300 leo au 450 baada ya miezi 12?

1. *KSH. 300 leo (Ruka hadi Swali 11)*
2. *KSH. 450 baada ya miezi 12 (Ruka hadi Swali 11)*

Please click 'Next' to continue.

10.17. (Q123) *Would you rather receive 300 shillings today or 555 shillings in 12 months?*

1. *KSH. 300 today (Continue)*
2. *KSH. 555 in 12 months (Skip to Q131)*

Je, ungependelea upokee 300 leo au 555 baada ya miezi 12?

1. *KSH. 300 leo (Endelea)*
2. *KSH. 555 baada ya miezi 12 (Ruka hadi Swali 131)*

Please click 'Next' to continue.

10.18. (Q124) *Would you rather receive 300 shillings today or 605 shillings in 12 months?*

1. *KSH. 300 today (Skip to Q128)*
2. *KSH. 605 in 12 months (Continue)*

Je, ungependelea upokee 300 leo au 605 baada ya miezi 12?

1. *KSH. 300 leo (Ruka hadi Swali 128)*
2. *KSH. 605 baada ya miezi 12 (Endelea)*

Please click 'Next' to continue.

10.19. (Q125) *Would you rather receive 300 shillings today or 580 shillings in 12 months?*

1. *KSH. 300 today (Continue)*
2. *KSH. 580 in 12 months (Skip to Q127)*

Je, ungependelea upokee 300 leo au 580 baada ya miezi 12?

1. *KSH. 300 leo (Endelea)*
2. *KSH. 580 baada ya miezi 12 (Ruka hadi Swali 127)*

Please click 'Next' to continue.

10.20. (Q126) *Would you rather receive 300 shillings today or 592 shillings in 12 months?*

1. *KSH. 300 today (Skip to Q11)*

2. KSH. 592 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 592 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 592 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.21. (Q127) Would you rather receive 300 shillings today or 567 shillings in 12 months?

1. KSH. 300 today (Skip to Q11)
2. KSH. 567 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 567 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 567 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.22. (Q128) Would you rather receive KSH. 300 today or 631 in 12 months?

1. KSH. 300 today (Continue)
2. KSH. 631 in 12 months (Skip to Q130)

Je, ungependelea upokee 300 leo au 631 baada ya miezi 12?

1. KSH. 300 leo (Endelea)
2. KSH. 631 baada ya miezi 12 (Ruka hadi Swali 130)

Please click 'Next' to continue.

10.23. (Q129) Would you rather receive KSH. 300 today or 644 in 12 months?

1. KSH. 300 today (Skip to Q11)
2. KSH. 644 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 644 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 644 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.24. (Q130) Would you rather receive KSH. 300 today or 618 in 12 months?

1. KSH. 300 today (Skip to Q11)
2. KSH. 618 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 618 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 618 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.25. (Q131) Would you rather receive KSH. 300 today or 507 in 12 months?

1. KSH. 300 today (Skip to Q135)
2. KSH. 507 in 12 months (Continue)

Je, ungependelea upokee 300 leo au 507 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 135)
2. KSH. 507 baada ya miezi 12 (Endelea)

Please click 'Next' to continue.

10.26. (Q132) *Would you rather receive KSH. 300 today or 484 in 12 months?*

1. KSH. 300 today (Skip to 134)
2. KSH. 484 in 12 months (Continue)

Je, ungependelea upokee 300 leo au 484 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 134)
2. KSH. 484 baada ya miezi 12 (Endelea)

Please click 'Next' to continue.

10.27. (Q133) *Would you rather receive KSH. 300 today or 473 in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 473 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 473 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 473 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.28. (Q134) *Would you rather receive KSH. 300 today or 495 in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 495 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 495 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 495 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.29. (Q135) *Would you rather receive KSH. 300 today or 531 in 12 months?*

1. KSH. 300 today (Skip to Q137)
2. KSH. 531 in 12 months (Continue)

Je, ungependelea upokee 300 leo au 531 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 137)
2. KSH. 531 baada ya miezi 12 (Endelea)

Please click 'Next' to continue.

10.30. (Q136) *Would you rather receive KSH. 300 today or 519 in 12 months?*

1. KSH. 300 today (Skip to Q11)
2. KSH. 519 in 12 months (Skip to Q11)

Je, ungependelea upokee 300 leo au 519 baada ya miezi 12?

1. KSH. 300 leo (Ruka hadi Swali 11)
2. KSH. 519 baada ya miezi 12 (Ruka hadi Swali 11)

Please click 'Next' to continue.

10.31. (Q137) *Would you rather receive KSH. 300 today or 543 in 12 months?*

1. *KSH. 300 today (Continue)*
2. *KSH. 543 in 12 months (Continue)*

Je, ungependelea upokee 300 leo au 543 baada ya miezi 12?

1. *KSH. 300 leo (Endelea)*
2. *KSH. 543 baada ya miezi 12 (Endelea)*

Please click 'Next' to continue.

11. Ambiguity aversion (quantitative measure)

Imagine you are going to play a game where you draw a ball out of a bag without looking. We have two bags, with 10 balls each.

Fikiria kuwa unaenda kucheza mchezo ambao unaokota mpira kutoka kwa mifuko bila kuangalia ndani ya mifuko. Tuna mifuko miwili, kila moja ina mipira kumi.

Look at this diagram:

Angalia picha hii:

In bag 1, out of 10 balls there are 4 red balls and 6 yellow balls.

Katika mfuko wa kwanza, kati ya mipira 10, kuna nne (4) nyekundu na sita (6) za yellow.

In bag 2, there are also 10 balls, but the number of red and yellow balls is unknown.

Katika mfuko wa pili, pia kuna mipira 10, lakini nambari ya mipira nyekundu na ya yellow haijulikani.

You can choose a bag from which you want to draw the ball.

Unaweza kuchagua mfuko unataka kuteka/kuchukua mpira.

If you choose bag 1, to win 50 shillings you need to draw a red ball.

Ukichagua mfuko wa 1, kujishindia shilling 50 unahitajika kuteka/kuchukua mpira mwekundu/red.

If you choose bag 2, to win 50 shillings you need to decide a color and draw a ball of that color.

Ukichagua mfuko wa pili, kujishindia shilingi 50 unahitaji kuamua rangi na kuteka/kuchukua mpira wa rangi hiyo.

Which bag would you like to choose from?

- 1) *Bag 1*
- 2) *Bag 2*

Ungependa kuchagua kutoka mfuko gani?

- 1) *Chagua mfuko 1*
- 2) *Chagua mfuko 2*

Please click 'Next' to continue.

12. Demographics

What is your year of birth?

Ulizaliwa mwaka gani?

Please click 'Next' to continue.

What is your gender?

- C. *Male*
- D. *Female*

Wewe ni wa jinsia gani?

- 1) *Mume*
- 2) *Mke*

Please click 'Next' to continue.

What is the highest level of education you have completed?

[Std 8, Form 1, Form 2, Form 3, Form 4, Form 5, Form 6, College Year 1, College Year 2, College Year 3, College Year 4, University Year 1, University Year 2, University Year 3, University Year 4, Polytechnic, Postgraduate study]

Ni kiwango gani cha juu cha masono umekamilisha?

[Std 8, Form 1, Form 2, Form 3, Form 4, Form 5, Form 6, College Year 1, College Year 2, College Year 3, College Year 4, University Year 1, University Year 2, University Year 3, University Year 4, Polytechnic, Postgraduate study]

Please click 'Next' to continue.

What is your employment status?

- 1) *Employed*
- 2) *Self-employed*
- 3) *Casual worker*
- 4) *Not working?*

Hali yako ya kazi ni gani?

- 1) *Nimeajiriwa*
- 2) *Nimejiajiri*
- 3) *Mfanyi kazi wa kawaida*
- 4) *Sina kazi*

Please click 'Next' to continue.

How often do you get your income?

- 1) *Daily*
- 2) *Weekly*
- 3) *Monthly*
- 4) *Do not work*

Je, unapata mapato yako mara ngapi?

- 1) *Kila siku*
- 2) *Kila wiki*
- 3) *Kila Mwezi*
- 4) *Sifanyi kazi*

Please click 'Next' to continue.

How much do you earn in a typical day?

Ni kiasi gani ya pesa unapokea kwa Kila siku?

Please click 'Next' to continue.

How much do you earn in a typical week?

Ni kiasi gani ya pesa unapokea kwa Kila wiki?

Please click 'Next' to continue.

How much do you earn in a typical month?

Ni kiasi gani ya pesa unapokea kwa Kila mwezi?

Please click 'Next' to continue.

What is your marital status?

- 5) *Single*
- 6) *Married*
- 7) *Divorced/Separated*
- 8) *Widowed*

Hali yako ya ndoa ni gani?

- 5) *Sijaolewa*
- 6) *Umeolewa*
- 7) *Kujitenga*
- 8) *Mjane*

Please click 'Next' to continue.

How many biological children do you have?

Uko na watoto wangapi wa kibiolojia?

Please click 'Next' to continue.

What is your mother tongue?

[Kikuyu, Luo, Luhya, Kisii, Kamba, Meru, Embu, Taita, Mbeere, Turkana, Maasai, Kalenjin, Pokomo, Boran, Mijikenda, Rendile, Taveta, Taita, Giriama, Pokot, Samburu, Nubian, Other (Specify)]

Lugha yako ya mama ni gani?

[Kikuyu, Luo, Luhya, Kisii, Kamba, Meru, Embu, Taita, Mbeere, Turkana, Maasai, Kalenjin, Pokomo, Boran, Mijikenda, Rendile, Taveta, Taita, Giriama, Pokot, Samburu, Nubian, Other (Specify)]

Please click 'Next' to continue.

Where is your home region where you were born?

Nyumbani kwenu uliko zaliwa ni wapi?

Please click 'Next' to continue.

What is your religion?

[Christianity, Islam, Buddhism, Hinduism]

Dini yako ni gani?

[Christianity, Islam, Buddhism, Hinduism]

Please click 'Next' to continue.

13. Memory measure

[Week One]

We are done with all the tasks. Now, we would like to ask you one more question. On the next screen you will see ten letters from the alphabet for 20 seconds. Please try to remember as many of them as possible. Then you will be asked to write them down.

Tumemaliza shughuli zote. Sasa, tungependa kukuuliza swali moja zaidi. Kwa skreeni ifuatayo, utaona herufi kumi kutoka kwa alfabeti kwa sekunde 20. Tafathali jaribu kumbuka nyingi uwezavyo, kisha tutakuuliza kuziandika chini.

Please click 'Next' to continue

N R O X S L P W A C

Please wait.

Tafathali ngoja.

Please write as many of the letters you just saw on the screen. You can write up to ten letters.

Tafathali andika herufi nyingi uwezavyo ulizoziona kwa skreen.

Please click 'Next' to continue.

[Week 2]

We are done with all the tasks. Now, we would like to ask you one more questions. Please write down the letters from the alphabet you saw at the end of your visit here last week on the computer screen. You can write up to ten letters.

Tumemaliza shughuli zote, Sasa, tungependa kukuuliza swali moja zaidi. Tafathali andika herufi kutoka kwa alfabeti ulizoona kwa computer wakati wa mwisho ulipokuja wiki iliyopita. Waweza kuandika hadi herufi kumi.

Please click 'Next' to continue.

Thank you for participating in this study. Remember that the answers you gave are completely confidential and will not be shared with anyone outside the research team in individualized form.

Asante kwa kushiriki katika utafiti huu. Kumbuka kwamba majibu uliyotoa ni ya siri kabisa na hayatashirikiwa na mtu yeyote aliye nje ya timu ya utafiti katika fomu ya kibinafsi.

You will get paid KSH. 200 for your participation and transport today, plus an additional KSH. 50 if you arrived on time, plus the payment of 200 shillings for your time.

Utalipwa KSH 200 kwa kushiriki kwako na nauli leo, pamoja na bonus ya Ksh 50 ikiwa ulifika mapema, pamoja na malipo ya shilingi 200 kwa wakati wako.

The session has finished. Please pack up your things now and join me. Wait in the waiting room until we pay you. Please give me the visitor pass and the place card on the way out. Thank you very much!

Utafiti umekamilika. Tafadhali, kusanya vitu vyako sasa kisha uje. Subiri katika chumba cha kungoja hadi tutakapo kulipa. Tafadhali nipee kadi ya nambari unapo ondoka. Asante sana.