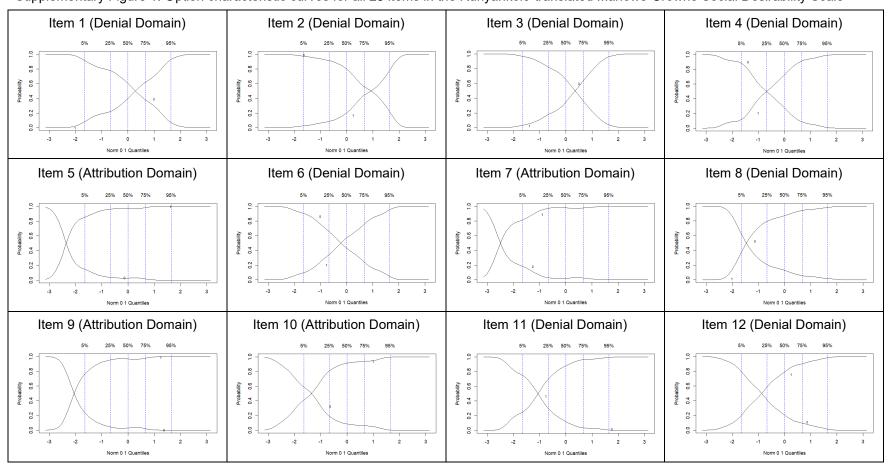
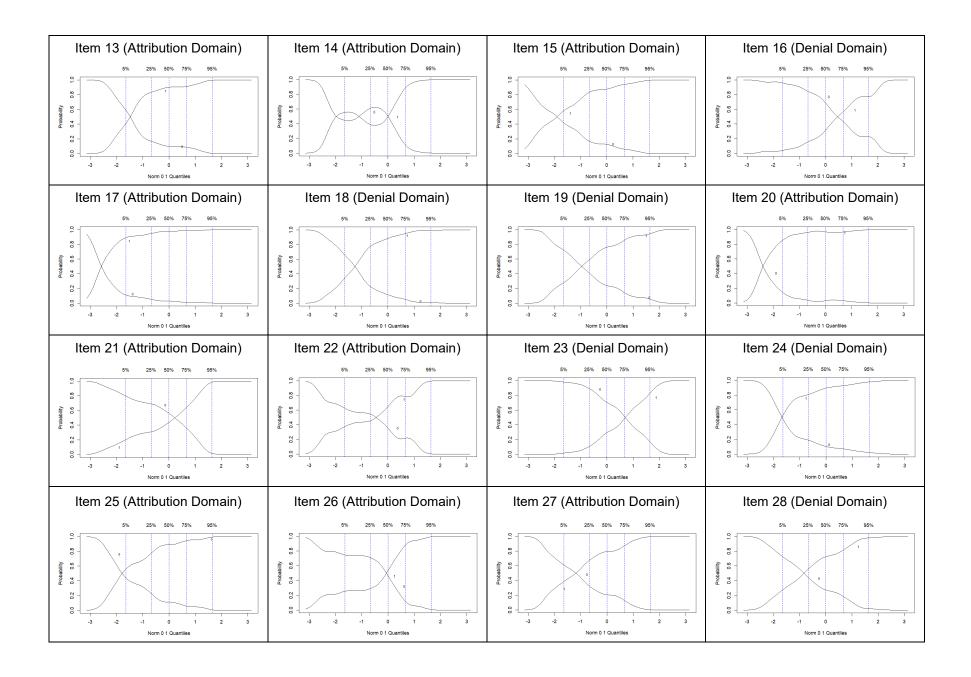
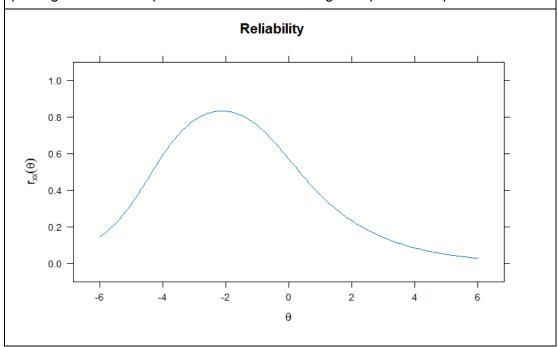
Supplementary Material

Supplementary Figure 1. Option characteristic curves for all 28 items in the Runyankole-translated Marlowe-Crowne Social Desirability Scale





Supplementary Figure 2. Reliability function for the 14-item Attribution Domain plotting Cronbach's alpha coefficient values along the spectrum of possible scores.



Supplementary Table 1. English and Runyankole-translated items from the adapted* Alcohol Use Disorders Identification Test – Consumption (AUDIT-C)

English (original)	Runyankole (translated)
In the past 3 months, how often did you have a drink containing alcohol?a	Nikangahi obu onyweire ekyokunywa kirimu ebirikusinza omumeezi 3 agahingwire? ^b
How many drinks containing alcohol did you have on a typical day when you were drinking in the past 3 months?c	Omumeezi 3 agahweire onyweire ebirikusinza birikwingana ki aha izooba rimwe obwobeire nonywa ebirikusinza?d
How often did you have six or more drinks on one occasion in the past 3 months?e	Nikangahi obu onyweire emisha mukaaga nokukiraho ahamurundi gumwe omumeezi 3 agahingwire? ^f

^{*}The AUDIT-C was adapted to ask study participants to recall their drinking behavior in the past three months.

^a Response options in English: never, monthly or less, 2 to 4 times per month, 2 to 3 times per week, 4 or more times per week

^b Response options translated in Runyankole: tiburiho, buri kwezi nari ahansi yokwezi, emirundi 2 kuhitsya 4 buri kwezi, Emirundi 2 kuhitsya 3 buri sande, emirundi 4 nari okukiraho buri sande

^c Response options in English: None, 1 or 2, 3 or 4, 5 or 6, 7 or 9, 10 or more

^d Response options translated in Runyankole: tikiriho, 1 or 2, 3 or 4, 5 or 6, 7 or 9, 10 nokukiraho Response options in English: never, less than monthly, monthly, weekly, daily or almost daily

f Response options translated in Runyankole: tiburiho, ahansi yokwezi, buri kwezi, buri sande, buri eizoba nari haihi buri eizoba

Supplementary Table 2. English and Runyankole-translated items from the adapted Duke University Religion (DUREL) Index

English (original)	Runyankole (translated)	
Organizational Religious Activity Domain		
How often do you attend church, mosque, or other religious meetings? ^a	Nikangahi obu orikuza omukanisa / omukereziya, omumuzigiti, nari ezindi nteerane zediini? ^b	
Non-Organizational Religious Activity Domain		
How often do you spend time in private religious activities, such as prayer, meditation or Bible/Koran study?c	Nikangahi obu orikumara obwire oyehereire omubikorwa byediini, nka okushaba,okushoma ebitabo ebirikwera nka Baibuli / Koran?d	
Intrinsic Religiosity Domain		
In my life, I experience the presence of the Divine (i.e., God)e	Omumagara gangye, ninyehuriramu obwa Rukiraboona (Ruhanga) ^f	
My religious beliefs are what really lie behind my whole approach to life ^e	Enyikiriza zangye omudiini nibyo birikutuma okundikutwara ensi ^f	
I try hard to carry my religion over into all other dealings in life ^e	Ningyezaho nkokukirikubaasika kureeba ngu ediini yangye nagitwara omubintu byoona ebindikukora omumagara gangye ^f	

^a Response options in English: never, once a year or less, a few times a year, a few times a month, once a week, more than once per week

^b Response options translated in Runyankole: tiburiho, omurundi gumwe omumwaka nari ahansi yomurundi gumwe, emirundi mikye omumwaka, emirundi mikye omukwezi, omurundi gumwe omusande, okurenga ahamurundi gumwe omusande

[°] Response options in English: rarely or never, a few times a month, once a week, two ormore times per week, daily, more than once a day

^d Response options translated in Runyankole: nibukye munonga / tiburiho, emirundi mikye omukwezi, omurundi gumwe omusande, emirundi ebiri nari okukiraho omusande, buri izooba, okurenga ahamurundi gumwe omwizooba

e Response options in English: definintely not true, tends not to be true, unsure, tends to be true, definintely true of me

f Response options translated in Runyankole: buzimazima tikihikire, nikishushana nkekitahikire, tinakikwasagye, nikishusha nkekihikire, buzimazima kihikire ahabwangye

Supplementary Table 3. Assessing differential item functioning (DIF) by gender in the denial domain of the 28-item Runyankole-translated Marlowe-Crowne Social Desirability Scale.

Item	p-value	DIF Effect Size	Expected Test Scores		
1	0.548	0.151	- Women ○ Men ○		
2 ^a	-	-			
3	0.008	-0.170			
4	0.660	-0.025	12 -		
6	0.001	0.109	9 10 -		
8	0.650	-0.239	$\ddot{\delta}$		
11	0.180	-0.168	8 - 8 -		
12	0.293	-0.019	Expected Test Score - 01 - 02 - 04 - 05 - 05 - 05 - 05 - 05 - 05 - 05		
16	0.753	-0.364	99 6 -		
18	0.217	-0.193	₩ 4 -		
19	0.025	0.147	And the state of t		
23ª	-	-	2 -		
24	0.254	-0.293	-2 -1 0 1		
28	0.600	-0.115	Focal Group Theta		

^a Used as anchor item

Supplementary Table 4. Linear regression of the association between the modified 27-item Runyankole-translated Marlowe-Crowne Social Desirability Scale and self-reported alcohol use stratified by study

	Study			
	DIPT (n=599)	Extend (n=261)	ADEPT-T (n=293)	
Unadjusted Model				
Self-reported alcohol use β	-0.10	-0.02	-0.10	
95% CI	-0.15 to -0.04	-0.13 to 0.08	-0.21 to 0.01	
p-value	<0.01	0.67	0.07	
Adjusted ^a Model				
Self-reported alcohol use β	-0.08	-0.01	-0.07	
95% CI	-0.13 to -0.03	-0.12 to 0.10	-0.16 to 0.02	
p-value	<0.01	0.88	0.12	

Abbreviations: ADEPT-T= the Alcohol Drinkers' Exposure to Preventive Therapy for TB study, AUDIT-C= Alcohol Use Disorders Identification Test – Consumption, β = beta coefficient, CI= confidence interval, DIPT= the Drinkers' Intervention to Prevent Tuberculosis RCT, Extend= the Mobile Technology to Extend Clinic-Based Counseling for HIV+s in Uganda RCT

^a Adjusted for age, gender, education, depression, religiosity, and the alcohol biomarker phosphatidylethanol.