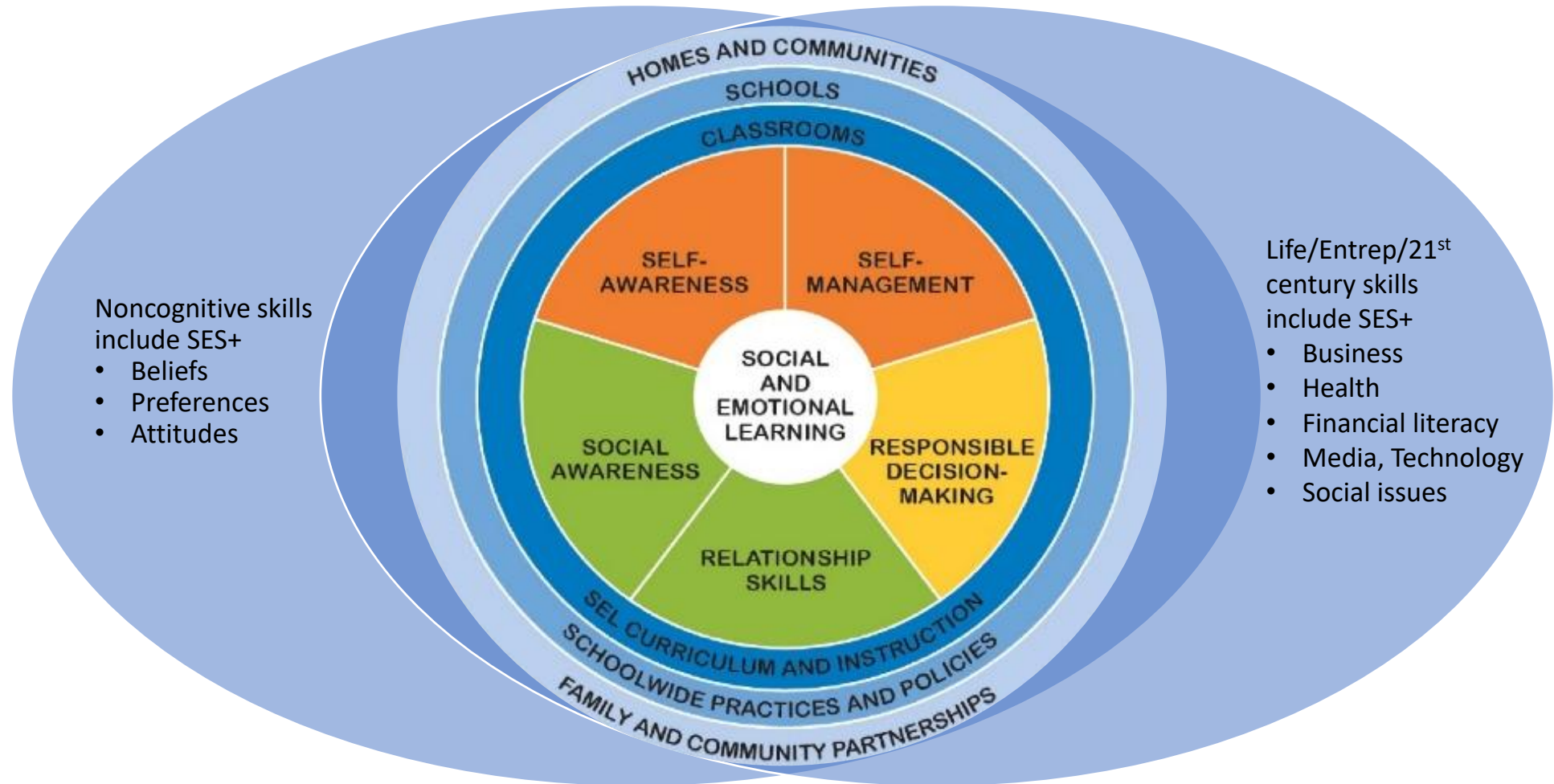


What are Socio-emotional Skills?

...awareness of and the ability to manage one's thoughts, emotions, and behavior



We know that SES matter and policy interest is growing

- **Range of outcomes**
 - Education
 - Throughout employment pipeline: job search, hiring/business creation, income/profits, job performance, decision making power over income
 - Risky behavior, violence, mental health
- **Increased interest because these skills**
 - Difficult to automate
 - Foundational (with literacy and numeracy)
 - Transferable across occupation, industry, geography (Cunningham & Villasenor, 2016)
 - Demonstrated unmet employer demand

But we know little about these skills

Status Quo

Key Policy Questions

- Where should policymakers concentrate their efforts: **which skills to target with interventions**
- How the effectiveness of training may vary with **gender, goals, available opportunities, norms**
- **Design:** Modalities, dosage, trainer characteristics, reinforcement, simultaneously tackling other constraints

Measurement Challenges

- Latent skills
- Few measures validated in LMIC contexts: translation, literacy, response scale
- Common measures
 - Not conceptually representative: self efficacy, self esteem, grit
 - Self-reporting bias: acquiescence, reference, recall, social desirability bias, tied to confidence and gender norms
- Task based measures measure specific component of overall skill, time consuming, online

What steps do we take

- **Meta-analysis** of existing studies: SES gender differences and relationship with employment
- Develop **framework**: Which skills matter for economic empowerment, and how does it differ with gender
- Develop **self-report and behavioral measures** of each skill
- Run 3 **RCTs** comparing bundles of skills
- Here, use **data on 14 socio-emotional skills and their aggregates in 3 contexts**: Nigeria (rural), Cote d'Ivoire (urban youth), Tanzania (urban youth, NEET)
 - Validate
 - Compare skills
 - Compare measurement types
 - Role of Gender

Development/Comparison>Which Skills

ESTEEM framework

Effective Socio-emotional skills To gain Economic EMpowerment

- Development
- Lit on Employment & Gender Differences
- Map to other Frameworks
- Focus Group Discussions
- Spanning Range of SES



	Intrapersonal	Interpersonal
Awareness	Emotional Awareness Self Awareness	Listening Empathy
Management	Emotional Regulation Self Control Personal Initiative Perseverance Problem Solving	Expressiveness Interpersonal Relatedness Influence Negotiation Collaboration

Another classification: agentic v. communal; some items also map to GSE

Which skills matter for economic empowerment?

TOC: Skills key to goal achievement, but they depend on the goal

Developing Preferences, Setting “Achievable” Internalized Goals

Emotional awareness

Self awareness

Listening

Empathy

Action Planning

Personal Initiative

Problem Solving

Taking Action

Self Control

Emotional Regulation

Perseverance

Expressiveness

Negotiation

Interpersonal

Relatedness

Influence

Collaboration

Key Behaviors for Economic Empowerment

*Developing Networks/
Obtaining support*

*Overcoming obstacles,
binding constraints,
social norms*

*Finding and utilizing
opportunities/solutions:
jobs/business/programs*

Background:

Measure Development & Validation



ipa

Context: Three RCTs, Not all measures used in all rounds

	Tanzania	Cote d'Ivoire	Nigeria
Program	BRAC ELA SES SES only <i>Dodoma, Dar es Salam, Iringa</i>	IRC Learn to Earn Vocational Training <i>Abidjan & Bassam</i>	APPEALS Agribusiness <i>6 States</i>
RCT Design	Control v. Awareness v. Management v. Both	Control v. Intrapersonal+LTE v. Interpersonal+LTE	APPEALS v. APPEALS+Inter v. APPEALS+Inter+Intra
Eligibility	NEET/Training Interest Ages 16-27	Applicants Ages 15-29	APPEALS Beneficiaries Ages 18+
Self Reports	14 skills	14 skills	6 skills for Endline only LIF sub-sample: 14 skills
Behavioral Measures	Baseline: (Tasks for 5 skills, SJTs for 9 skills) Endline: 14 skills (Tasks for 3 skills, SJTs for 11 skills)	SJTs for 3 skills for first cohort, an additional 4 skills added SJTs abbreviated - only 1 scenario	SJTs for 13 skills, 1 Listening task: Endline only LIF sub-sample data: SJTs for 12 skills, tasks for 2 skills

Example Measures

- **Self Report Scale (Empathy: Cognitive & Affective)**

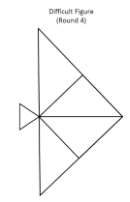
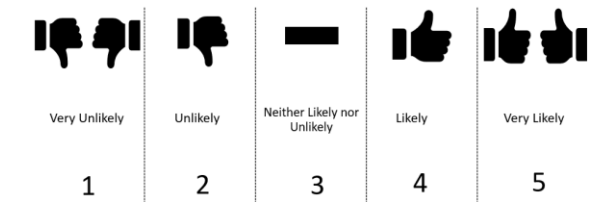
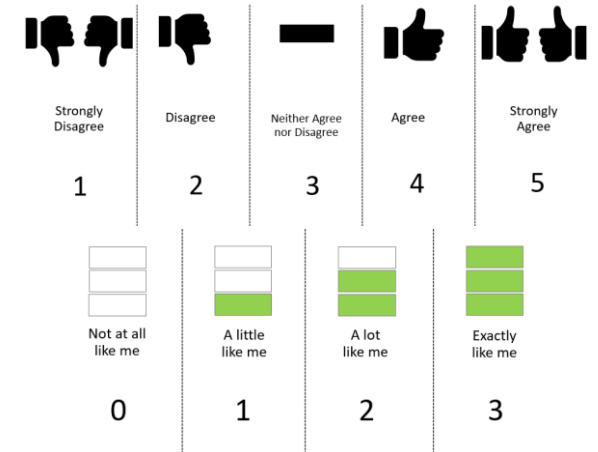
- I try to understand the perspective of others before making a decision that affects them.
- When I'm upset at someone, I usually try to imagine myself in their situation to better understand them.
- Before judging somebody, I try to imagine how I would feel if I were in their place.
- I ask questions to understand the other person's position on a given issue.
- I always try to understand the feelings of people I trust
- If I see someone is hurt, I feel upset
- I feel good when I help someone in need
- If others are happy, I feel good
- I can quickly sense when someone in the group is uncomfortable

- **Situational Judgement Tests (Emotional Regulation)**

- You farm fish at home and sell them, with your $\{relationb\}$'s help. Your $\{relationb\}$ accidentally fed the fish some old food, so half of your fish died. You are very upset.
- How likely are you to:
- *Yell at your $\{relationb\}$
 - *Talk to your $\{relationb\}$ immediately so they know how angry you are.
 - *Become so stressed that you get upset at others
 - *Take time to relax and calm down before you talk to your $\{relationb\}$
 - *Discuss your anger with someone you trust
 - *Change how you think about the situation so you're less angry
- How long are you likely to stay stressed or upset: Less than an hour, a few hours, the whole day, a few days, or longer

- **Perseverance: (adapted from Alan 2019/Ubfal)**

Count Triangles over several rounds; choose easy v. difficult



Correlations between measure types for the same skill were low to moderate: 0.02 to .39

Measure Selection

Reviewed existing measures/tasks for literacy, time, content validity

Why SJTs

- Easier to understand, retained respondent interest
- Unlike SR, Socially desirable response is less clear
- Low domain ambiguity, easy contextualization
- Sphere for each skill: business, wage work, community, household
- Embedded tasks

Administering measures

- Time for all 14 skills: SR 30-45 minutes, BEH 45-60 minutes
- Individuals point to laminated image: reduces data collection time, respondent can consider entire scale

Measure Development

Iterative Psychometric Analysis

Content Validity

Focus Groups/
Interviews w.
Entrepreneurs

- Which skills
- Which behaviors
- Critical incident sourcing

Cognitive
Interviews

- Assess understanding

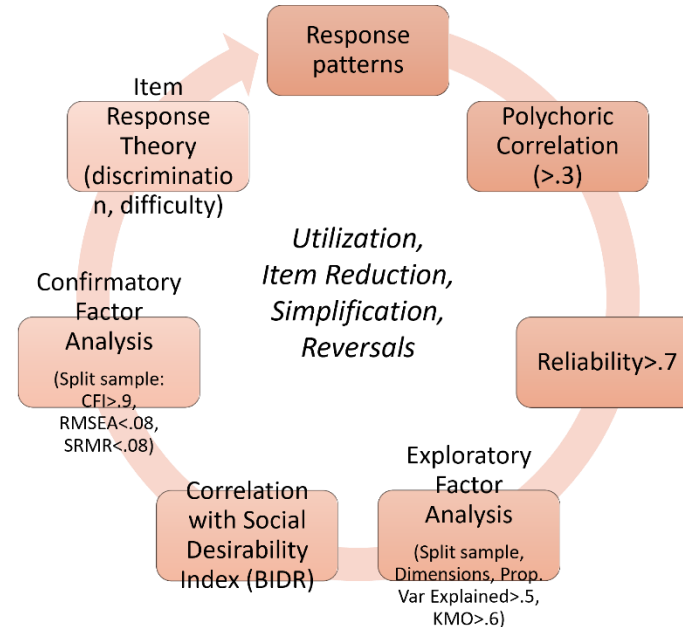
Intensive
Translations

- Translation ratings, Linguistic Feedback, Glossary

Review from
Subject Matter
Experts

- Psychologists, SES Curricula, Education Assessment, Field Coordinators

Psychometrics in each context



Key Learnings

- Importance of each content validity step
- Tasks often time consuming and focus on sub-skill
- 2 skills had 2 dimensions: Listening & Relatedness
- Behaviors depend on spheres -> scenario-development was key
- Method differentiates factors more than skill
- Reversed items could not be included on the same scale

Psychometric tables: Self-Report Scales

Skill	Tanzania Baseline					Cote d'Ivoire Cohort 3					Cronbach's Alpha	Nigeria Endline				
	Cronbach's Alpha	CFI	TLI	RMSEA	SRMR	Cronbach's Alpha	CFI	TLI	RMSEA	SRMR		CFI	TLI	RMSEA	SRMR	
Emotional Awareness	0.696	0.997	0.995	0.040	0.020	0.662	0.990	0.984	0.063	0.040						
Self Aware	0.821	0.993	0.991	0.065	0.037	0.736	0.989	0.985	0.072	0.048						
Emotional Regulation	0.756	0.996	0.994	0.046	0.027	0.716	0.986	0.981	0.082	0.049	0.914	0.995	0.994	0.081	0.039	
Self control	0.797	0.992	0.984	0.096	0.037	0.797	0.994	0.990	0.060	0.032						
Perseverance	0.655	0.990	0.984	0.058	0.036	0.708	0.995	0.992	0.052	0.032	0.859	0.996	0.995	0.057	0.031	
Personal Initiative	0.824	0.991	0.988	0.064	0.043	0.738	0.990	0.987	0.066	0.046	0.889	0.994	0.992	0.068	0.042	
PSDM	0.840	0.986	0.983	0.060	0.045	0.762	0.994	0.993	0.039	0.036	0.898	0.988	0.986	0.079	0.053	
<i>Respectful Listening</i>	0.811	1.000	1.000	0.000	0.000	0.811	1.000	1.000	0.000	0.000						
<i>Active Listening</i>	0.731	0.999	0.998	0.037	0.013	0.731	1.000	1.000	0.000	0.000						
Empathy	0.734	0.992	0.988	0.056	0.034	0.734	0.992	0.989	0.063	0.038	0.858	0.993	0.991	0.072	0.042	
Expressiveness	0.742	0.983	0.977	0.072	0.045	0.757	0.994	0.992	0.044	0.034						
Relatedness	0.821	0.993	0.990	0.043	0.037	0.821	0.993	0.990	0.043	0.037	0.895	0.995	0.994	0.055	0.035	
<i>Maintaining Relations</i>	0.811	0.997	0.996	0.052	0.026	0.811	0.997	0.995	0.067	0.031	0.853	0.998	0.997	0.051	0.026	
<i>Networking</i>	0.706	0.997	0.992	0.061	0.021	0.706	1.000	1.001	0.000	0.002	0.822	0.997	0.996	0.056	0.027	
Influence	0.713	0.999	0.998	0.026	0.015	0.713	0.997	0.993	0.044	0.025						
Negotiation	0.767	0.999	0.998	0.031	0.017	0.710	0.993	0.989	0.061	0.037	0.884	0.997	0.996	0.061	0.030	
Collaboration	0.787	0.992	0.986	0.084	0.043	0.820	0.996	0.994	0.071	0.036						
GSE	0.716	0.979	0.973	0.061	0.047	0.716	0.971	0.963	0.069	0.059	0.841	0.980	0.974	0.093	0.063	

Thresholds: Cronbach's Alpha > .7, CFI/TLI > .9, RMSEA < .08, SRMR < .06

Psychometric tables: Behavioral measures

Skill	Tanzania Baseline					Cote d'Ivoire Cohort 3: ABBREVIATED					Nigeria Endline				
	Cronbach's Alpha	CFI	TLI	RMSEA	SRMR	Cronbach's Alpha	CFI	TLI	RMSEA	SRMR	Cronbach's Alpha	CFI	TLI	RMSEA	SRMR
Emotional Awareness	0.82	1.00	0.99	0.05	0.03	0.59	0.99	0.98	0.07	0.02	0.92	1.00	0.99	0.05	0.03
Self Aware	0.84	1.00	1.00	0.02	0.02	0.65	1.00	1.00	0.04	0.02	0.90	0.99	0.99	0.05	0.04
Emotional Regulation	0.79	1.00	0.99	0.07	0.03	0.76	0.94	0.91	0.15	0.07	0.73	0.99	0.99	0.06	0.04
Self control												1.00	1.00	0.03	0.01
Perseverance						0.71	1.00	0.99	0.06	0.02	0.90	1.00	1.00	0.06	0.03
Personal Initiative	0.87	0.99	0.99	0.05	0.03	0.48	1.00	1.00	0.00	0.00	0.89	1.00	1.00	0.04	0.02
PSDM	0.86	0.99	0.99	0.07	0.04	0.45	1.00	1.00	0.03	0.01	0.90	1.00	1.00	0.03	0.02
<i>Active Listening</i>	0.88	1.00	1.00	0.02	0.03						0.90	1.00	1.00	0.02	0.00
<i>Listening Comprehension</i>											0.74	1.00	1.00	0.03	0.02
Empathy											0.98	0.99	0.99	0.06	0.04
Expressiveness	0.79	1.00	1.00	0.07	0.02	0.72	0.99	0.98	0.07	0.04	0.93	1.00	1.00	0.03	0.02
<i>Maintaining Relations</i>	0.76	0.99	0.99	0.07	0.04						0.92	0.98	0.98	0.08	0.05
<i>Networking</i>	0.81	1.00	1.00	0.03	0.02						0.93	1.00	0.99	0.05	0.03
Influence	0.79	1.00	1.00	0.01	0.01						0.95	1.00	1.00	0.02	0.01
Negotiation	0.86	0.99	0.99	0.06	0.04	0.80	0.98	0.97	0.06	0.04	0.97	0.99	0.99	0.04	0.03
Collaboration						0.79	0.99	0.98	0.06	0.04	0.97	1.00	0.99	0.05	0.03
GSE	0.74	1.00	1.00	0.02	0.01						0.61	0.99	0.98	0.07	0.03

Thresholds: Cronbach's Alpha > .7, CFI/TLI > .9, RMSEA < .08, SRMR < .06

Analysis:

Heterogeneity & Relationships between SES measures and Key outcomes



ipa

Estimation strategy

Our main estimations are the following specification:

$$Y_{it} = \alpha + \beta_1 S_{it} + \beta_2 X'_{it} + \varepsilon_{it} \text{ for individual } i \text{ at time } t; \text{ where:}$$

- Y_{it} is the outcome variable for study i at time t
- X'_{it} is a vector of control variables for individual i and time t
 - *gender*
 - *age (integer)*
 - *education (a continuous variable measuring educational attainment ranging from 0 to 14)*
 - *marital status (a dummy variable equal to 1 if an individual is married or co-habiting)*
 - *dummy for each round of data collection*
 - *cognitive ability*
- Clustered standard errors at individual level
- Data pooled across time (Baseline+control group), Not pooled across studies
- Studies were inconsistent on whether they had all Self reports v. Behavioral measures, and for which round
- CDI also examined Household Informant Interviews, abbreviated SJTs

We also examined a dynamic/predictive specification: $Y_{i1} = \alpha + \beta_1 S_{i1} + \beta_2 S_{i0} + \beta_3 Y_{i0} + \beta_4 X'_{it} + \varepsilon_{it}$

Results: Relation between skills & outcomes

Employment Status

Employed=1

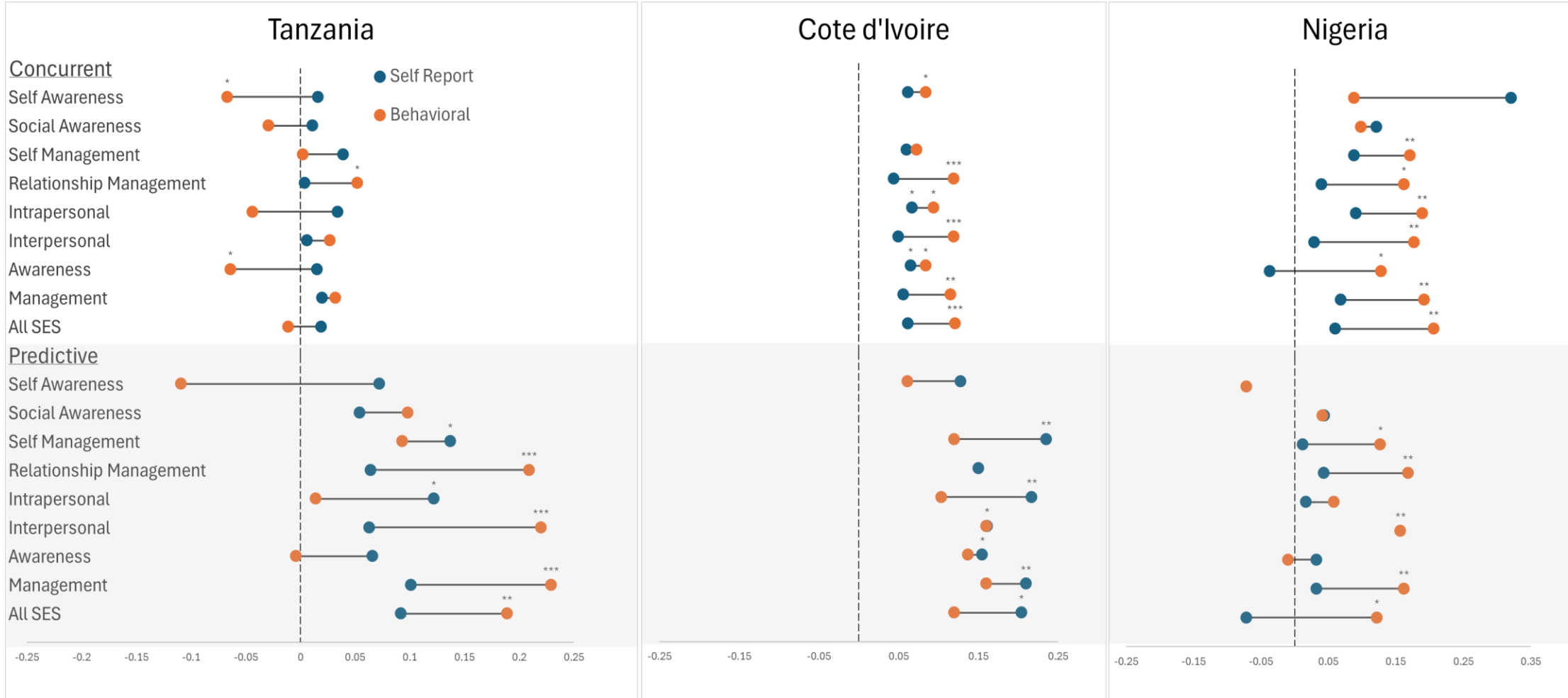


Range:
Concurrent:
-.29 to .28

Stronger for Beh
in Tanz/Nigeria,
Mixed in Cote
d'Ivoire

**Promising
skills:**
Perseverance,
Collab, Influence,
Empathy, PSDM,
Personal Initiative

Relationships
Management



Results: Relation between skills & outcomes

Income



Range:

Concurrent:

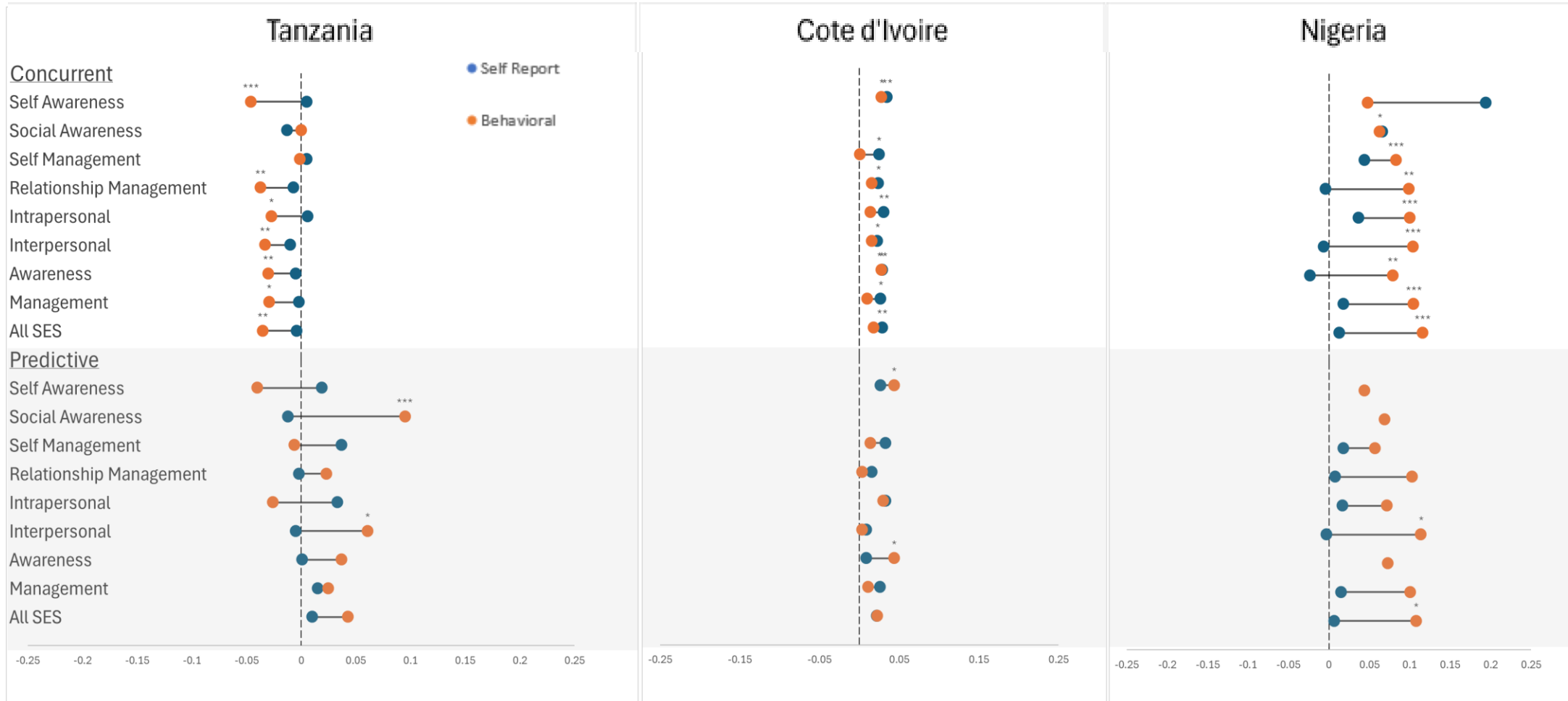
-.25 to .56

Stronger for BEH in
Nigeria/Tanz

Dynamic results
stronger for Beh

Promising skills:

Perseverance,
PSDM, Self
Control, Emotional
Regulation,
Expressiveness



Results: Relation between skills & outcomes

Anxiety

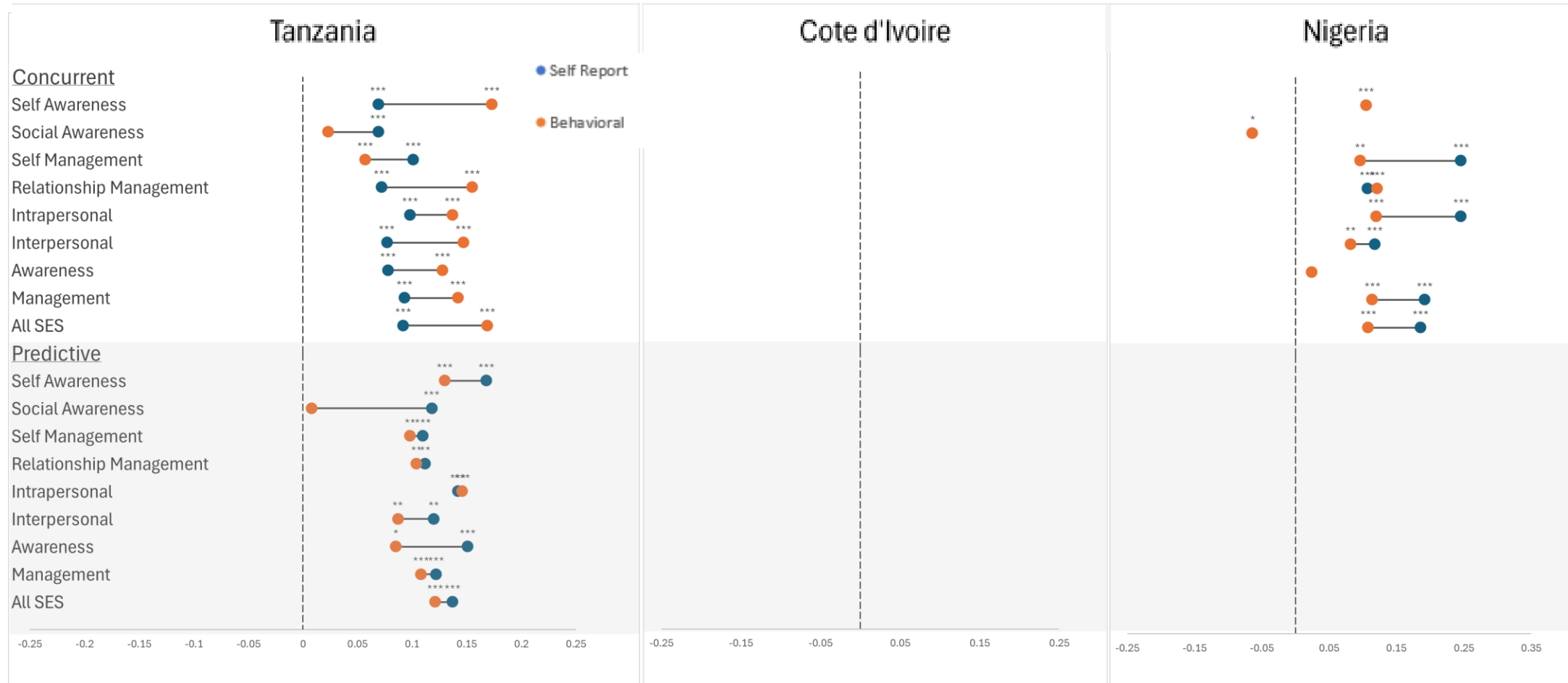


Range:
Concurrent:
-.12 to .44

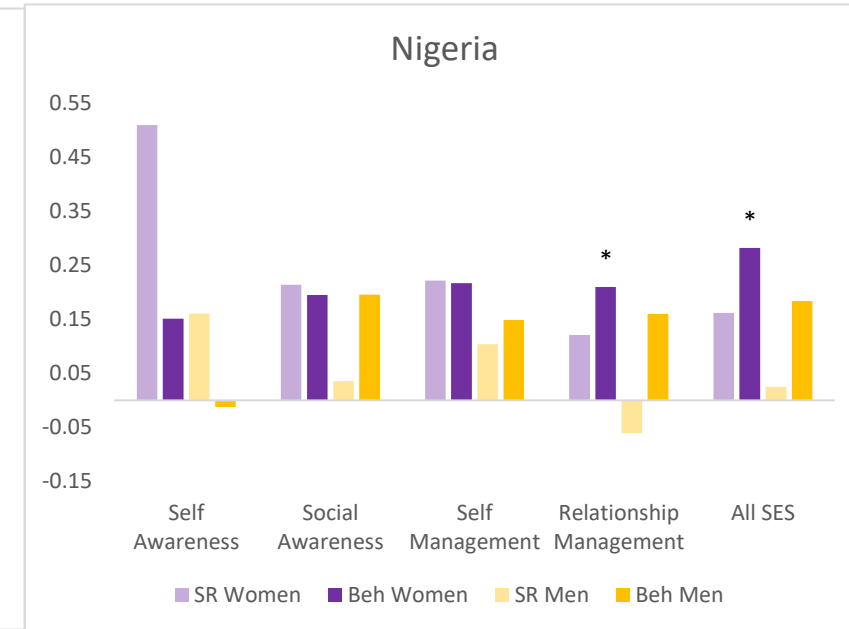
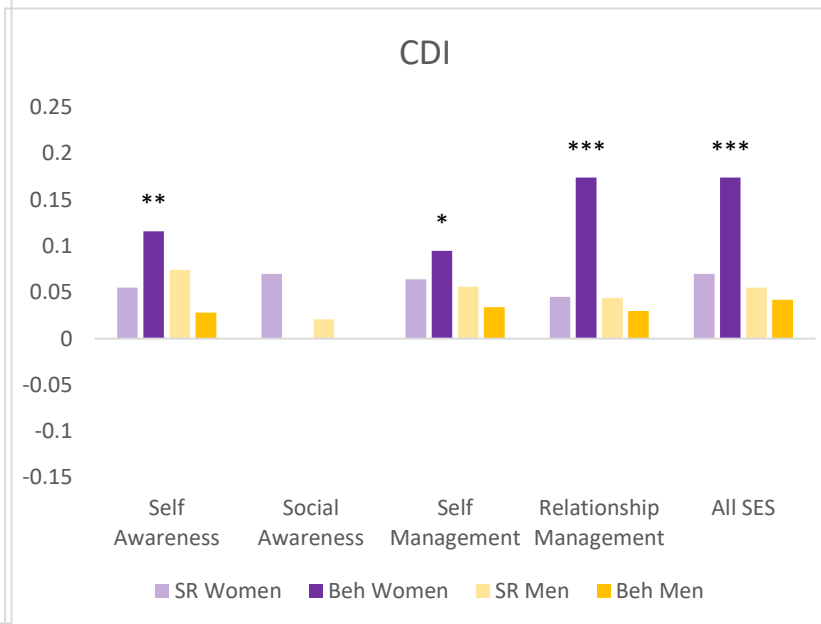
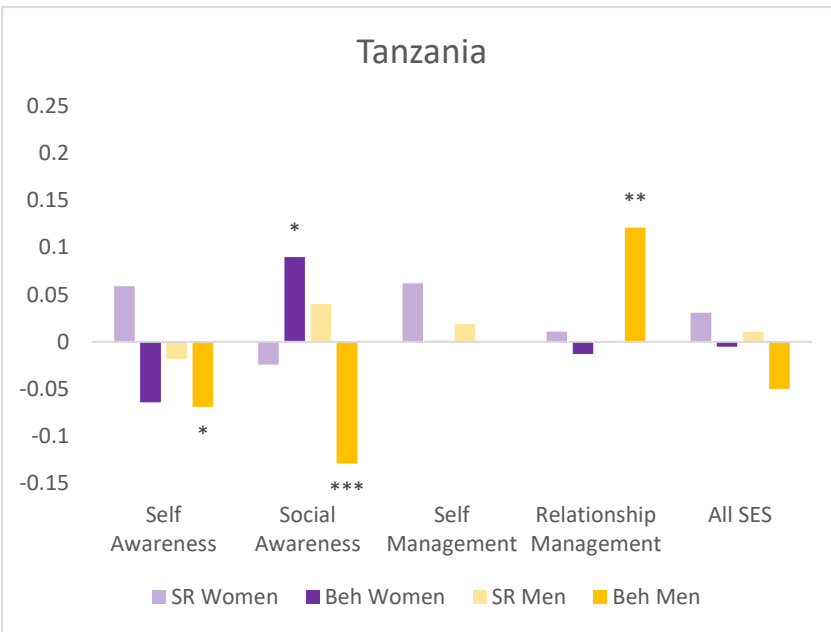
SR often
stronger, mixed in
Tanzania

**Promising
skills:**
Self Awareness,
Relatedness,
Emotional
regulation, Self
Control, Personal
Initiative, PSDM,
GSE

Self awareness,
Relationship
Manag.



Heterogeneity by Gender: Employment



No significant correlations with SR measures.

For behavioral measures:

- **Tanzania:** Relationship management for men
- **CDI:** Positive correlation primarily driven by women
- **Nigeria:** Positive correlation with Management skills for women

Heterogeneity by Gender: Income



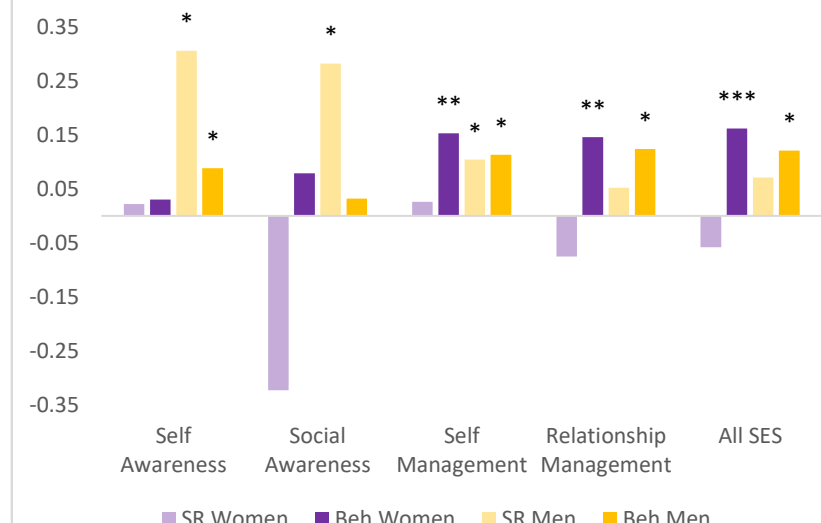
Tanzania



CDI



Nigeria

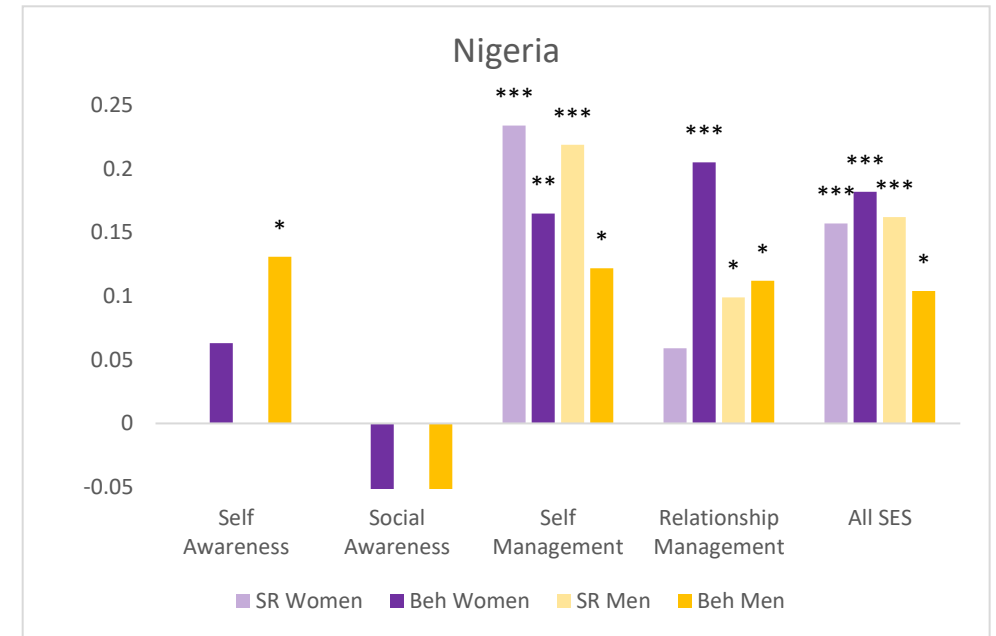
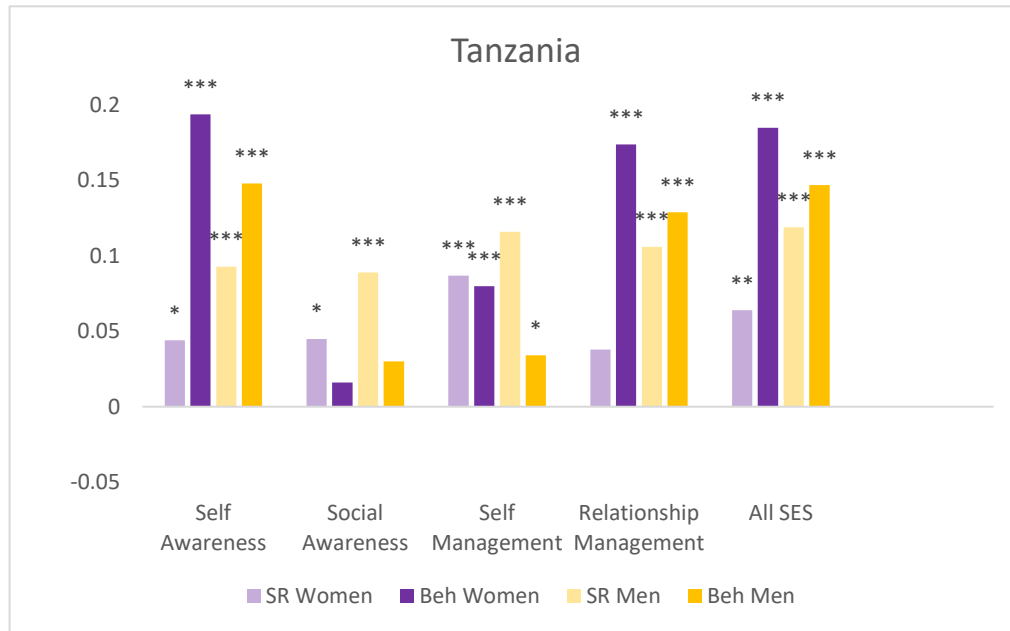


Tanzania: Only positive: social awareness for women

CDI: Positive correlations driven by women

Nigeria: Positive correlation for men's SR measures; Awareness skills for men; Strong positive association with Beh measures for both men and women.

Heterogeneity by Gender: Anxiety



Both Samples: Positive correlations across gender and measure type; variation in which measure type stronger
Awareness skills sig in Tanzania

Do any individual skills stand out across samples? *MHT+Vote counting*

	Employment outcomes (Employment, Income, Own a Business, NEET)	Employment behaviors (Job Search, Income Aspirations, Decision-Making power)	Other (Mental Health, Lower IPV Acceptability)
Self Reports	Income/NEET: GSE (others with results in CDI, not Tanz/Nig)	Job search: Networking, GSE Decision making power: Emotional Awareness, Self Control	Anxiety: PSDM, GSE, Empathy, Maintaining Relationships Depression/Mental Health: PSDM, GSE, Emotional awareness, Perseverance, Expressiveness IPV Acceptability: PSDM, Networking, Negotiation, GSE, Self Management
Behavioral	Empl/NEET: Perseverance Income: PSDM Hours: PSDM Relationship Management 2/4 Awareness, 7/10 Manage.	Self Management	Anxiety: Emot. Regulation, Maintaining Relationships, Networking Depression/Mental Health: Emotional Reg IPV Acceptability: Emotional Regulation, PSDM, Self Management Time on HH chores for men: Listening Gender Norms: Emotional Regulation, Perseverance, PSDM, Expressiveness
Measure comparison	Stronger results for Behavioral measures	SR stronger: job search, income aspirations (esp Nig.) BEH stronger: decision making in Tanzania	Beh stronger: Mental health Mixed: IPV

Key Take-aways/Discussion

- **SR & BEH measures demonstrate strong psychometric properties; SR stronger association with BIDR**
- **Which Measurement Type**
 - Employment: only BEH
 - Income: mix of BEH/SR, but no consistent results for SR
 - Employment behaviors/Decision-making: mixed, more SR
 - Mental health: Both; SR stronger magnitudes
 - IPV: mixed, more SR
 - Dynamic results for labor outcomes: BEH promising
- **Which skills?**
 - Relationship Management matters as much or more than Self Management for Employment
- **Implications**
 - Curricula and measures need to consider relationship management skills, which is often not included
 - In development process, we learned about how skill “levels” depend on the “sphere” of usage
 - Heterogeneity by goals
 - Is it levels of skills that matter, how much you value them, or whether others value you having them?
- **Future work**
 - **Unipolar response scale**
 - **Shorter scales**
 - **Heterogeneity by goals**
 - **AI for measuring interpersonal skills**

Website: www.poverty-action.org/ses

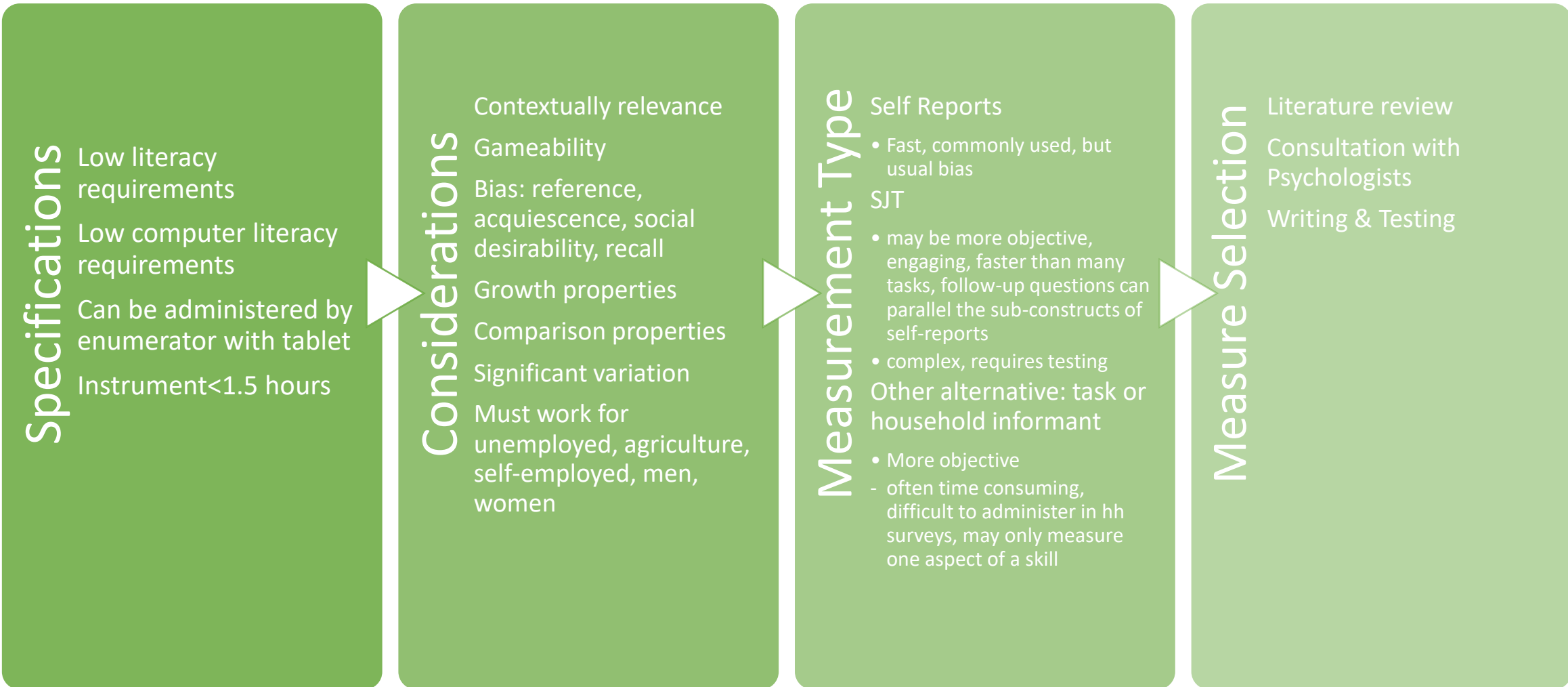


ESTEEM framework: Definitions

- Considerations**
- Literature on Gender differences and Economic Empowerment
 - Spanning range of SES
 - Overlap (categorization exercise) & Expected Dependencies
 - Skills discussed in FGDs
 - Mapping to other frameworks
 - CASEL
 - YouthPower
 - Big 5

	Intrapersonal	Interpersonal
Awareness	<p>Emotional Awareness: identifying and accepting one's emotions</p> <p>Self Awareness: identifying and interpreting one's own thoughts and behaviors and to evaluate one's strengths and weakness</p>	<p>Listening: attending to what other people are saying, taking time to understand other's point of view, asking clarifying questions and not interrupting at inappropriate times</p> <p>Empathy: understand another's viewpoint or thoughts and have emotional concern for another's situation or experience</p>
Management	<p>Emotional Regulation: maintaining or changing one's own emotions by controlling one's thoughts and behavioral responses</p> <p>Self Control: focusing one's attention, staying on task, breaking habits, restraining impulses and keeping good self-discipline</p> <p>Personal Initiative: developing long-term goal, to seek opportunities to improve one's self and to be motivated to put these plans and goals into action</p> <p>Perseverance: sustaining effort despite setbacks</p> <p>Problem Solving: approaching a problem by gathering information, generating a number of solutions and evaluating the consequences of these solutions before acting</p>	<p>Expressiveness: explaining ideas in a way that others will understand and openly expressing one's opinion</p> <p>Interpersonal Relatedness: taking actions intended to build trust and benefit others, initiating and maintaining relationships and being respectful, encouraging and caring for others</p> <p>Interpersonal Influence: communicating in a manner that changes other's perspectives and adapting one's behavior in situationally appropriate ways to influence others</p> <p>Negotiation: identifying own and others interests to brainstorm mutually beneficial solutions and maximize own self interest</p> <p>Collaboration: considering different perspective, listening and communicating in groups of two or more people, identifying situations involving group problem-solving and decision-making, and organizing and coordinating team members to create shared plans and goals</p>

3. Measuring SES



Administering measures

Why SJTs

- Easier to understand, retained respondent interest
- Unlike SR, Socially desirable response is less clear
- Allow control over setting: labor, gender of individuals, etc. ; can contextualize to culturally relevant behaviors
- Tasks are often time consuming, measure one specific part of a concept/self report scale, difficult to administer offline
- Our modifications
 - Varied format to make it easier to understand in household survey setting
 - Examine relative responses
 - Items mirror self reports =>similar theoretical content
 - Multiple spheres: entrepreneur, wage work, household

Tips for administration

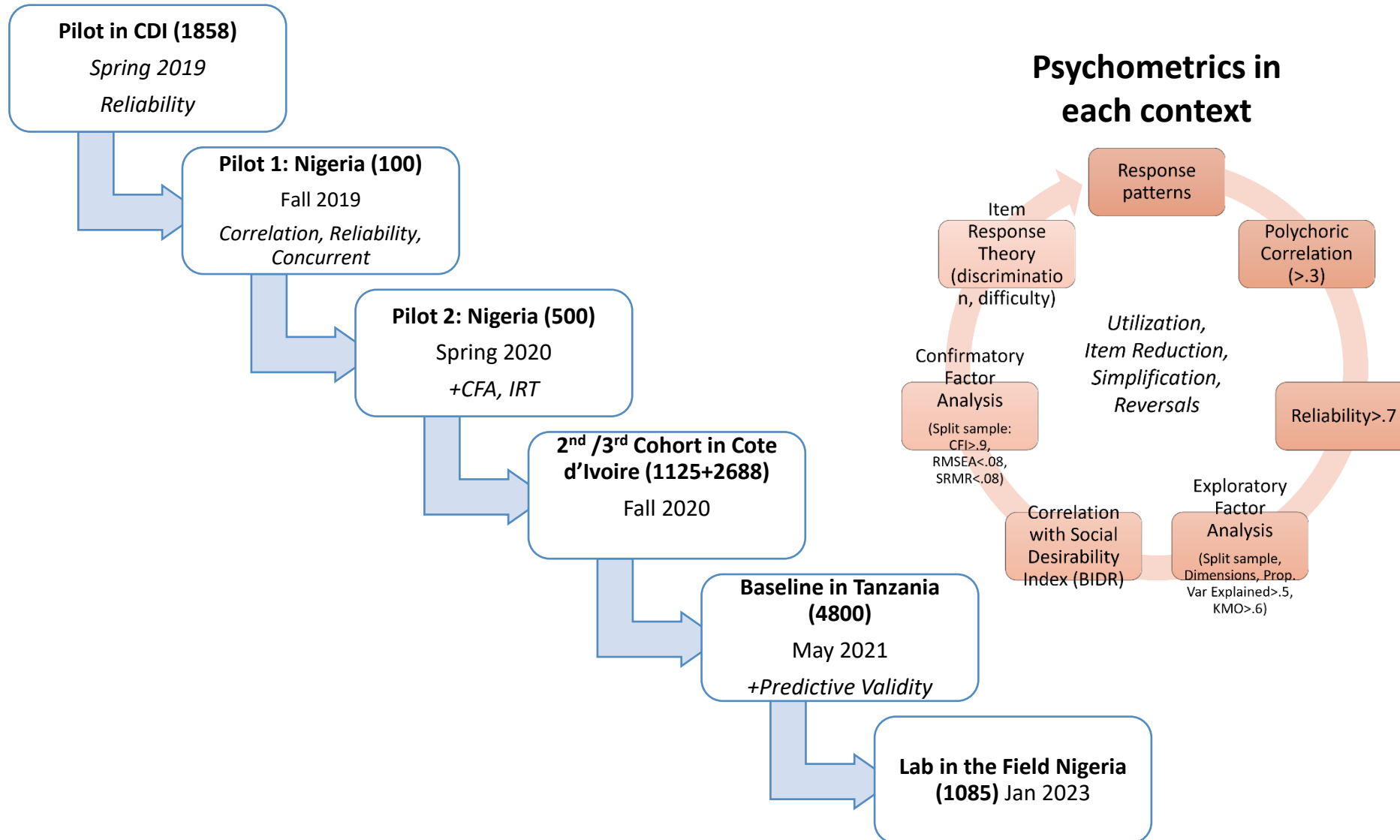
- Time for all 14 skills: SR 30-45 minutes, BEH 45-60 minutes
- Individuals point to laminated image: reduces data collection time, respondent can consider entire scale
- Keep scales together, but mix with other modules
- SJTs only: Encourage enumerators to read situations slowly, make regular eye contact to engage

Adapting measures to new contexts

- Ideal recommendation if same language: Cronbach's alpha, CFA to remove items if necessary
- If new language: Cognitive interviews to check for understanding
- SJTs only: placeholders for context-relevant names/business types
 - Examine whether situations relevant for population- if very different may need to redo critical incident sourcing, check that follow-up questions fit context

Iterative Psychometric Analysis

Analysis in each context



Why study gender differences in SES?

- Which SES matter most? Which matter most for women?
- Identify **which SES to target** to improve female and male youth labor market outcomes:
 - Mixed evidence on differences in **levels**:
 - Significant male advantage in all self-reported skills except self-control (Ajayi et al., 2023)
 - No gender bias in measures of growth mindset, mastery orientation and grit (Napolitano et al., 2021)
 - Differences in **returns**:
 - Interpersonal skills more strongly correlated with earnings for women than for men (Ajayi et al. 2023)
 - Differences in returns to agreeableness (Nyhus & Pons, 2012; Nordman et al., 2015)
- SES that matter for job search and employability might be different for men and women

Descriptives

	Tanzania	Cote d'Ivoire	Nigeria
Program	BRAC ELA SES SES only <i>Dodoma, Dar es Salam, Iringa</i>	IRC Learn to Earn Vocational Training <i>Abidjan & Bassam</i>	APPEALS Agribusiness <i>6 States</i>
RCT Design	Control v. Awareness v. Management v. Both	Control v. Intrapersonal+LTE v. Interpersonal+LTE	APPEALS v. APPEALS+Inter v. APPEALS+Inter+Intra
Eligibility	NEET/Training Interest Ages 16-27	Applicants Ages 15-29	APPEALS Beneficiaries Ages 18+
Gender	0.5	0.5	0.5
Age	21.46	25.42	33.2
Marital Status	0.12	0.2	0.72
Education	9.49	9.45	13.1
Cognitive Ability	0.7	0.58	0.67
Attending School	0.05	0.12	0.16
Employed	0.38	0.85	0.85
Self-employed	0.27	0.4	0.69
IHS monthly inc.	2.08	7.49	11.5

Heterogeneity in skills



Self-Reported (SR) measures:

- **Men** report higher SES on most measures in Tanz/CDI, not Nigeria
- **Age** is positively associated with SR scores in Tanz/CDI, not Nigeria
- Higher **social desirability** is consistently linked to higher SR SES.
- Higher **education** levels often correspond to lower SR scores in Tanz, higher scores in CDI, and no differences in Nigeria

Behavioral measures, differences were skill-specific

- **Gender** differences are more mixed, with men scoring higher for only a few skills (influence, expressiveness, PSDM), and women scoring higher on 1-2 skills (emotional awareness in Tanzania/CDI)
- **Age** is positively associated with scores in CDI, a few skills in Nigeria, not Tanz
- Associated to higher social **desirability**, but lower magnitude than SR in Tanz/CDI, similar in Nigeria
- **Education** associated with higher skills in CDI, higher relationship management in Tanz/Nigeria, and lower social awareness in Tanz

Emotional awareness

In survey: 5 self-reported items & 2 situational judgment tests

Examples of self-reported items

- “I know why my feelings change from one moment to another.”
- “I recognize what I am feeling.”
- “I can usually describe what I am feeling at the moment in great detail.”
- “I try to notice my thoughts without judging them.”
- “I am able to accept the thoughts and feelings I have.”

Example of a situational judgment test

"You needed to complete a task for your boss, $\{name1\}$, but you were late! Your boss gets angry and says ""how can you be so irresponsible and stupid""?"

- b. How likely are you to: Notice how your boss's words made you feel
- c. How likely are you to: Notice whether your feelings have caused any physical sensation in your body
- c2. How long are you likely to feel stressed or upset: Less than an hour, a few hours, the whole day, a few days, or longer
- d. How likely are you to: Identify that you are feeling shame
- e. How likely are you to: Reflect on other times that people's words made you feel this way

Self awareness

In survey: 9 self-reported items & 3 situational judgment tests

Examples of self-reported items

- “I understand my own behaviors.”
- “I am aware of my thoughts.”
- “I monitor my thinking to ensure it is accurate.”
- “I analyze my behavior after I make mistakes.”

Example of a situation judgment test

"You like your job, and customers seem to love you. But your boss, $\{name4\}$. has criticized your performance at work. $\{pronoun3\}$ only gave you 2 out of 5 stars on your performance review."

- a. How likely are you to: Stay confident in your abilities
- c. How likely are you to: Take time to think about how you can improve
- d. How likely are you to: Sit down and talk to $\{name4\}$ about why you received poor marks
- hx. What skills and strengths do you have that will make you a good candidate for a new job in retail? Please list all of your SKILLS AND STRENGTHS. If you prefer, you can say "Don't know" or "None".
- ix. What weaknesses would make you a poor candidate for a new job in retail? Please list all of your WEAKNESSES. If you prefer, you can say "Don't know" or "None".

Emotional regulation

In survey: 9 self-reported items & 2 situational judgment tests

Examples of self-reported items

- “When I feel nervous, I know what to do to feel more relaxed.”
- “When I feel sad, I know how to take my mind off my problems.”
- “When I am angry at someone, I can calm down before talking to them.”
- “When I’m faced with a stressful situation, I make myself think about it in a way that helps me stay calm.”

Example of a situational judgment test

You are in charge of the decorations for an annual meeting. Your employee, $\{name3\}$, was supposed to bring the flowers and they didn't reach on time for the meeting. The customer is angry at you and threatening to not work with you next year. You feel ashamed that you failed the customer.

- a. How likely are you to: Yell at your employee, $\{name3\}$
- b. How likely are you to: Talk to your employee immediately so they know how angry you are.
- c. How likely are you to: Become so stressed that you get upset at others
- e. How likely are you to: Take time to relax and calm down before you talk to your employee
- f. How likely are you to: Discuss your stress with someone you trust
- g. How likely are you to: Change how you think about the situation so you're less angry
- d. How long are you likely to feel stressed or upset: Less than an hour, a few hours, the whole day, a few days, or longer

Self control

In survey: 6 self-reported items +1 task

Examples of self-reported items

- “I say inappropriate things.”
- “Pleasure and fun sometimes keep me from getting work done.”
- “I do things that feel good in the moment, but I will regret later on.”
- “Sometimes I can’t stop myself from doing something, even if I know it is wrong.”

Examples of Enumerator post-survey questions:

- It was easy for respondent to focus on what he/she was doing.
- Respondent rushed through the activities without being really attentive.

Task: Continuous Performance Task (CPT-X):

“In this task, you will be shown a list of letters, one by one. Your job here is, to figure out whether each letter is an X, or not an X. Each time you see an X. Do NOT touch the screen. If you are shown another letter, you answer by touching the screen quickly. Try and answer quickly while maintaining focus. Touch the screen when you are ready to start. You will start by doing some exercises as examples.”

Perseverance

In survey: 6 self-reported items & 1 task

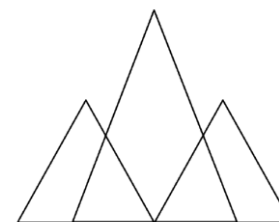
Examples of self-reported items

- “I finish whatever I begin.”
- “Setbacks don’t discourage me.”
- “I am diligent.”
- “When work is difficult, I keep up my effort.”

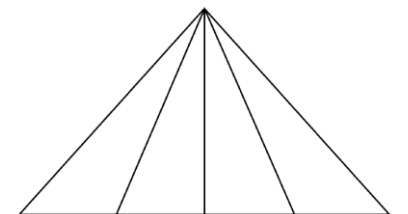
Triangle Task

- After viewing example puzzles, Which version of the game do you want to play for the next: Easy or Difficult
- You have 60 seconds to count the number of triangles in the figure.
- Would you like to continue, or end the game?
- 2 practice rounds, 4 test rounds

Easy Figure
(Round 6)



Difficult Figure
(Round 6)



Personal initiative

In survey: 9 self-reported items & 3 situational judgment tests

Examples of self-reported items

- “I actively tackle problems.”
- “Whenever something goes wrong, I search for a solution immediately.”
- “Whenever there is a chance to get actively involved, I take it.”
- “I take action immediately even when others don’t.”

Example of a situational judgment test

SJT1. Imagine you want to open a clothing shop and you have some savings. Unfortunately, you know very little about the clothing business. You ask your friends or family, and they also do not know about the business.

b. How likely is it that you will: Do research on clothing shops online in your spare time

c. How likely is it that you will: Look for a training

You do not know any clothing shop owners,

d. How likely is it that you will: Find some clothing shop owners to ask for advice

f. How likely is it that you will: Open the shop and learn the business as you go.

Problem-solving and decision-making

In survey: 16 self-reported items & 4 situational judgment tests

Examples of self-reported items

- “I solve most problems if I put in the necessary effort.”
- “I can find creative solutions to unplanned problems.”
- “I can always solve difficult problems if I try hard enough.”
- “If someone needs input on a problem, I can come up with many suggestions.”

Example of a situational judgment test

"You are part of a group organizing an annual festival for the surrounding 5 neighborhoods! $\{name1\}$ was in charge of publicizing the event, but you just found out that most don't know when the event is, some have never heard of it, and hardly anyone is planning to come! The event is in two days."

- b. How likely is it that you will: Contact $\{name1\}$ to ask what went wrong?
- c. How likely is it that you will: Contact $\{name1\}$ to ask what methods of advertising were used?
- d. How likely is it that you will: Think of as many ideas as possible for solving this problem.
- e. How likely is it that you will: Contact friends to ask for help coming up with as many ideas as possible.
- f. How likely is it that you will: Solve this problem and have high event attendance

Listening



In survey: 7 self-reported items

Examples of self-reported items

- “I ask questions to understand the other person’s position on an issue.”
- “When I am listening to someone, I make sure they know I am interested in what they are saying.”
- “When I am listening to someone, I show them that I am open to their ideas.”
- “When I am listening to someone, I ask questions that show my understanding of what they are saying.
- “I begin talking before the other person finishes talking.”
- “If I have something to say that is important, I will interrupt the other person.” (reverse)
- “I share my opinion without listening to others’ opinions.” (reverse)

Listening

In survey: 3 scenario-based tasks

Example of a situational judgment test

"Imagine that I am your neighbor. I just found about a new business that you would like to learn about! Feel free to ask questions if you want to know more about the business. Ready?"

My friend, $\{name5\}$, just started a business where he processes rice and sells different products made of rice. They are making a lot of money: Tsh 45,000 per week. They attended a training for a few hours a day for 2 months. The training is held every 6 months in training centers all over our region. The best part is that little investment or equipment is required. Two other friends went into the same business- one made the same amount- the other made a bit less because they made some mistakes. Should you pursue this business?"

- 4 active listening questions: e.g. Enumerator: as you were saying the story, did the respondent show they were listening, by using body language, e.g. nodding?
- Enumerator: as you were saying the story, did the respondent show they were listening by making comments, e.g. "oh really" "yes" "mmhmm" etc. ?
- 4 Listening comprehension questions: e.g. What income did $\{name5\}$ make per week?

Empathy



In survey: 7 self-reported items & 1 task

Examples of self-reported items

- “When I’m upset at someone, I usually try to imagine myself in their situation to better understand them.”
- “Before judging somebody, I try to imagine how I would feel if I were in their place.”
- “I ask questions to understand the other person's position on a given issue.”
- “I always try to understand the feelings of people I trust.”
- “If someone is hurt, it makes me upset.”

Task: Rate level of pleasure and arousal for self and the other individual after hearing a list of scenarios

Expressiveness

In survey: 12 self-reported items & 3 situational judgment tests

Examples of self-reported items

- “I ask for what I need when I need it.”
- “I think it's good to ask for what I want.”
- “I find it easy to explain my perspective to others.”

Example of a situational judgment test

Imagine you are attending a community meeting, and they are deciding whether to build a school, a clinic, or a road. The meeting has 30 men and 30 women, including your spouse.

- How likely are you to: Stand up and share your opinion about the road
- You are curious about how long each project will take: How likely are you to speak up and ask this question?
- You have the idea that everyone should vote to decide which project to choose: How likely are you to: Discuss your idea with the person sitting next to you?
- How likely are you to: Share your idea with the group without hesitation?

Relatedness: 2 dimensions

Initiating Relationships (Networking) & Maintaining Relationships

In survey: 10 self-reported items & 4 situational judgment tests

Examples of self-reported items

- “I listen patiently when people tell me their problems.”
- “When I see that someone is going through a difficult time, I help out the best I can.”
- “I give my friends and family encouragement when they need it.”

Example of a situational judgment test

A customer, $\{name3\}$, who you have seen before but don't know well comes to your shop. $\{name3\}$ really wants to buy rice but they have had troubles this week and they don't have enough money to pay this time. There are others in line and $\{name3\}$ is taking time.

- Which picture best describes your tone?
- Which picture best describes your tone?
- How likely are you to
- Dismiss $\{name3\}$
- Tell $\{name3\}$ to return when they have money
- Allow $\{name3\}$ to pay back later
- Make sure $\{name3\}$ know you are assessing their trustworthiness
- Encourage $\{name3\}$ to share why they cannot pay
- Reassure $\{name3\}$ that things will get better

Influence



In survey: 8 self-reported items & 2 situational judgment tests

Examples of self-reported items

- “Other people do what I ask them to do.”
- “When someone disagrees with me, I know how to adjust my argument to change their opinion.”
- “I am good at getting people to help me when I need it.”

Example of a situational judgment test

You want to start a new business, making banana chips with a new method. To start the business, you need your family's support because it will affect their financial situation. Currently your family does not want you to start the business.

- How likely is it that you will: Try to convince your family to let you start the business
- How likely is it that you will: Ask questions to understand why your family opposes you
- How likely is it that you will: Analyze your family's behavior carefully, to decide the best time to convince them
- How likely is it that you will: Discuss the benefits and consequences of starting the business with them
- Would you use any other methods to persuade your family?
- Now imagine that your brother recently failed in his business. Would you use any other methods to persuade your family?
- How likely is it that you will: Not be able to change your family's perspective.

Negotiation

In survey: 8 self-reported items & 3 situational judgment tests

Examples of self-reported items

- “When I disagree with someone, I try to understand how that person feels.”
- “When I disagree with someone, I am still able to listen to the other person’s perspective.”
- “When I disagree with someone, I am able to give up some things I want to solve our disagreement.”

Example of a situational judgment test

Your work has become busier and you have less time for household responsibilities. If you have help at home, your income could increase! However, your 15 year old son does not want to help with cleaning or caring for the younger children. If he has extra time, he just wants to play football with his friends.

- How likely is it that you will: Accept the situation and don't say anything
- How likely is it that you will: Tell him he has to do some household work and has no choice
- How likely is it that you will: Explain that if he helps, the whole family will benefit
- How likely is it that you will: Allow him to go play football if he completes his responsibilities

Collaboration



In survey: 7 self-reported items & 1 task

Examples of self-reported items

- “When I work with others, I tell others my ideas and ask for theirs in return.”
- “I can tell when a problem should be solved by a team of many people instead of one person alone.”
- “When I don’t know a solution to a problem, I can brainstorm with a group of people to get better ideas.”

Task: Simulated SMS conversation to find a market stand: *“Looks like the group has sent you a message. Which of these responses, is most like how you would respond in this situation?”*