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Mapping Humanity

Gender Norms, Youth Agency, and SRH Outcomes: Evidence from Kenya and Nigeria

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Outline

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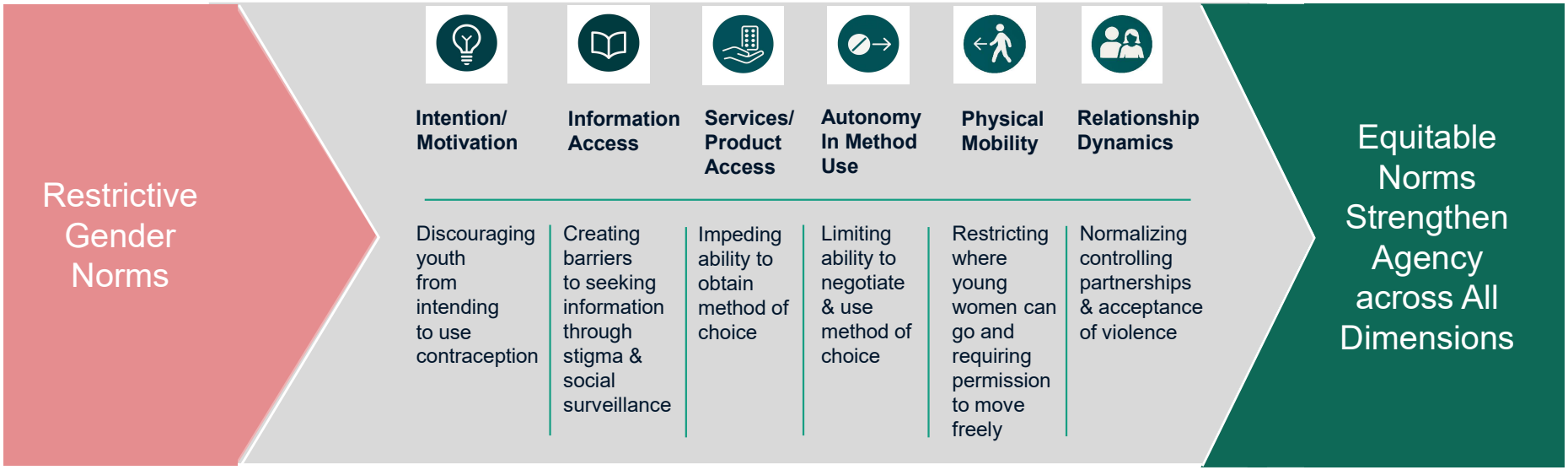
RATIONALE AND CONCEPTUAL FRAMEWORK

How Restrictive and Equitable Norms Shape Youth SRH Agency

Gender norms shape the pathways through which youth exercise SRH agency. For AGYW and ABYM, restrictive norms can constrain choice and action at multiple points - from intention and information-seeking to access, autonomy, and relationship dynamics. Despite growing investment in norm change, evidence on *how* these pathways operate, and where normative pressures are most binding, remains limited by data gaps. This analysis uses nationally representative, spatially disaggregated data from Nigeria and Kenya to map how norms influence agency across the SRH decision-making chain.



Key Insight: Restrictive norms constrain across every step of the SRH agency pathway - equitable norms remove barriers and expand agency, access, and decision-making power.

RESEARCH QUESTIONS

To unpack how gender norms shape youth SRH agency across the decision-making pathway, we examined three questions focused on *what types of norms matter, for whom, and in what contexts:*

1

NORMATIVE INFLUENCE

Which types of gender norms — *self-perceived or collective (reference group)* — more strongly shape different determinants of SRH agency?

2

GENDER DIFFERENCES

Does the influence of gender norms on the determinants of SRH agency vary by *gender (AGYW vs. ABYM)?*

3

CONTEXT MATTERS

How do these normative pathways differ *across settings and contexts* by determinants?

METHODS – DATA AND SAMPLE

Data for this analysis come from the Fraym Data Engine - a high-frequency platform that integrates nationally representative CATI survey data with spatial data inputs to generate granular, one-square-kilometer estimates using machine learning. We draw on both the primary survey data and spatially modeled estimates aggregated to the ward level in Nigeria and Kenya.

SURVEY MODE

Nationally representative CATI surveys to support the Data Engine's high frequency capabilities.

TARGET POPULATION

Samples includes 15–69-year-olds, with oversampling of AGYW and ABYM (ages 15-24) – key sub-groups of interest.

SAMPLE DESIGN

Random digit dialing to ensure equal probability sampling of all phone subscribers.

Additional steps include : (i) nested ADM1 quotas for age group, gender, education, wealth; (ii) phone hand-offs, and (iii) rural targeting.

COLLECTION SAFEGUARDS

Extensive survey scripting and training for all CATI enumerators.

Use of female enumerators to reduce enumerator gender biases.

Phone handoffs to reach young and older women, and other harder-to-reach population groups who do not personally own or control a phone.

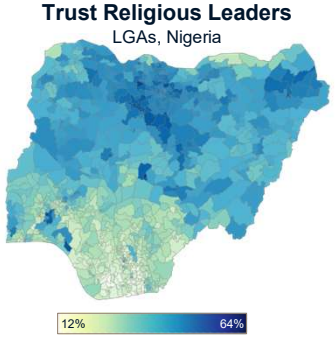
SAMPLE SIZE

Nigeria:
Total: ~ 13,000
AGYW: 4,700
ABYM: 4,700
Ward: 9,308

Kenya:
Total: 6,200
AGYW: 2,500
ABYM: 2,600
Ward: 1,449

SPATIAL DATA MODELING

Fraym's technology transforms this scientifically sampled training data (survey microdata) into community level data outputs.



Analytical Framework: Key Measures and Model Structure

OUTCOMES OF INTEREST
Dependent Variables

SRH Agency Outcomes

- Intent to Use Contraception
- Ability to access SRH information
- Ability to obtain contraception of choice
- Ability to use contraception of choice
- Agency over mobility (AGYW only)
- Living in a controlling relationship
- ABYM attitudes towards wife beating (ABYM only)

NORMATIVE ENVIRONMENT
Independent Variables

Microdata (Individual Level)

Predicted gender-equitable norms score for an individual using the G-NORM scale

- Self-Perceived G-NORM Score

Spatial Estimates (Community Level (ADM3))

Predicted scores for each reference group at ward-level using scores generated in training data

- G-NORM Score (All Community)
- G-NORM Score (Older Adults)
- G-NORM Score (AGYW)
- G-NORM Score (ABYM)

SOCIO-DEMOGRAPHICS
Covariates

- Age
- Socio-Economic Status
- Education
- Urbanicity
- Religion
- Region
- Partnership Status
- Parental Status

NOTE 1: In Nigeria, AGYW analysis used Fraym data from Q1 2024 (n = 4,793) and ABYM analysis used Fraym data from Q3 2024 (n = 4,696). For Modern Contraceptive Use, only sexually active individuals were included, and analysis was run on samples of 1,508 AGYW and 1,552 ABYM.
NOTE 2: Spatial estimates were generated and aggregated at the ward level to map respondents to ward-level predicted scores. Due to variations in ADM3 reported by respondents and official shapefiles in Q1 data, reference group models were run on a sample of 4,577 AGYW and 1,458 sexually active AGYW. No variations were found in Q3 data hence all ABYM spatial analyses were run on the full ABYM sample (n = 4,696).
NOTE 3: All analyses utilize survey weights to ensure representativeness and account for the complex survey design to provide robust and reliable estimates.

RESULTS – IMPACT OF GENDER NORMS ON YOUTH SRH AGENCY

Multivariate Regression Results: Impact of Community Gender Norms on AGYW & ABYM SRH Agency Outcomes in Nigeria (OR (SE))

Outcomes	AGYW					ABYM				
	Gender Norm Exposures (Self and Key Reference Groups)									
	Self	Community	AGYW	Adults	ABYM	Self	Community	ABYM	Adults	AGYW
Intent to Use Contraception	1.01*** (0.00)	1.03* (0.01)	1.02* (0.01)	1.02* (0.01)		1.01*** (0.00)				
Ability to Access Information	1.02*** (0.00)	1.05*** (0.01)	1.04*** (0.01)	1.02* (0.01)		1.01*** (0.00)	1.02* (0.01)	1.02** (0.01)	1.02* (0.01)	
Ability to Obtain a Method	1.01*** (0.00)	1.05*** (0.01)	1.03** (0.01)	1.03** (0.01)		1.01*** (0.00)				
Ability to Use Chosen Method	1.01** (0.00)	1.04** (0.01)	1.02* (0.01)			1.01** (0.00)				
Controlling Partnerships			0.95* (0.02)		0.96* (0.02)	0.97*** (0.01)				
Agency over Mobility (AGYW only)	1.01** (0.00)		1.02* (0.01)			-	-	-	-	-
Attitude Wife-beating (ABYM only)	-	-	-	-	-	1.02*** (0.00)	1.03* (0.01)	1.03** (0.01)		

Note: Models control for age, urbanicity, religion, education, socio-economic status, parental and partnership status, and geopolitical zone. Standard errors are in parentheses. Only statistically significant results are shown. Darker green indicates stronger positive associations; gray indicates no association; salmon indicates an association in the opposite direction. Significance levels: ***p < 0.001; **p < 0.01; *p < 0.05.*

RESULTS – IMPACT OF GENDER NORMS ON YOUTH SRH AGENCY

Multivariate Regression Results: Impact of Community Gender Norms on AGYW SRH Outcomes in Kenya (OR (SE))

Outcomes	AGYW					ABYM				
	Gender Norm Exposures (Self and Key Reference Groups)									
	Self	Community	AGYW	Adults	ABYM	Self	Community	AGYW	Adults	ABYM
Intent to Use Contraception						0.99 (0.00) **	1.06 (0.03) *		1.04 (0.02) * [3]	
Ability to Access Information	1.01** (0.00)					1.005 (0.00) *				
Ability to Obtain Method							1.05 (0.02) *		1.03 (0.02) *	
Ability to Use Chosen Method			1.03*(0.01)							
Agency over Mobility (AGYW only)	1.01** (0.00)					-	-	-	-	-
Controlling Partnerships	0.98 (0.01) **	0.88 (0.05) *				0.99 (0.01) **				
Attitude Wife-beating (ABYM only)	-	-	-	-	-	1.02 (0.00) ***	1.07 (0.02) **	1.04 (0.02) *		1.06 (0.02) **

Note: Models control for age, urbanicity, religion, education, socio-economic status, parental and partnership status, and province. Standard errors are in parentheses. Only statistically significant results are shown. Darker green indicates stronger positive associations; gray indicates no association; salmon indicates an association in the opposite direction. Significance levels: ***p < 0.001; **p < 0.01; *p < 0.05.*

SYNTHESIS – NORMATIVE INTENSITY AND SRH AGENCY ACROSS GENDER AND CONTEXT

Nigerian: AGYW

Deeply Embedded Norms

- **Multi-layered Influence**: Both self-perceived and collective reference group norms shape all determinants of SRH agency, with **stronger associations with collective norms.**
- **Implications**: Expanding SRH agency will likely require interventions targeting both **individual perceptions and empowerment, and collective norms.**

Nigerian: ABYM

Self Internalized Norms

- **Primarily self-perceived influence**: Individual's perceived equitable norms largely determine SRH agency, with small reinforcement from collective community or peer norms.
- **Implications:** Interventions that focus on **individual perceptions and empowerment** may be sufficient, except for gender-based violence attitudes, where collective **peer norms** remain influential.

Kenyan AYA

Contextually Weaker Norms

- **Weaker, more diffuse influence**: Overall **weaker influence** and **pattern of influence is reversed from Nigeria**. For AGYW access and mobility associated by self-perceived norms, where as relationship dynamics more strongly associated with collective norms. For ABYM – collective norms more critical.
- **Implications**: Norms-focused interventions may NOT be primary entry point for most SRH outcomes. **Targeted approach** may be more impactful.

Key Insights: Normative environments influence SRH agency differently by gender and context. Understanding these variations is critical for identifying when norm-shifting approaches are essential and when other structural or individual levers may be more effective.

EVIDENCE TO ACTION - IMPLICATIONS & STRATEGIC PRIORITIES

CRITICAL: Normative influence varies by context and sub-group — diagnose architecture first to guide resource allocation, then design and test whether intensive, targeted, or multi-level approaches work best in each setting.

Implementation

- **Formative Research First**: Map local normative architecture — assess which reference groups (community, peers, adults) matter most for key SRH outcomes before designing interventions.
- **Tailor by Gender *and* Context**: Nigerian and Kenyan findings show that gender operates differently across settings - what works for AGYW in Nigeria (community-level) may not for Kenya (individual-level focus).
- **IMPLICATION:** Effective programming requires diagnosing the most binding constraints - whether normative or other structural drivers - before choosing the entry point.

Measurement

- **Measure Beyond Individual Attitudes**: Measure both self-perceived and collective (reference group) norms to capture the full normative environment - especially in high-constraint contexts.
- **Disaggregate Agency Dimensions**: Track intention, access, autonomy, and mobility separately to identify where norms most constrain agency.
- **Leverage Sub-national Data**: Use local data to design, adapt and monitor programs.

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Research & Learning

- **Understand Why Patterns Vary**: Why do Nigerian AGYW face collective constraints while Kenyan AGYW don't? Why does the pattern reverse for ABYM? Mechanisms, not just associations, are key for translation.
- **Match Design to Context:** Not all contexts require intensive norms change; others may need comprehensive multi-level approaches that address individuals *and* communities.
- **Iterate and Adapt**: Use high-frequency data to refine programming and identify when successful approaches transfer across contexts.

DISCUSSION AND NEXT STEPS

These results should be considered in light of several methodological caveats. Nevertheless, this analysis offers a novel, population-based, and spatially disaggregated analysis that integrates multiple measures of gender norms and SRH agency determinants to provide a comprehensive understanding of how normative environments shape youth agency.

1

LIMITATIONS

1. **Cross-sectional Design:** Analysis based on cross-sectional data and therefore captures associations and not causal relationships.
2. **Sampling and Coverage Limitations:** Despite best efforts, non-phone users - often the poorest and hardest-to-reach AGYW - may be underrepresented, potentially biasing estimates downward.
3. **Modeling and Spatial Estimation Noise:** Geospatial modeling can introduce variance in estimates of the normative environment. Fraym mitigates this through best-practice validation - minimizing RMSE and benchmarking predicted aggregates against survey-based data.

2

LOOKING AHEAD

Despite these limits, this analysis offers one of the most **comprehensive population-level views** of gender norms and SRH agency in Africa.

Next steps include ***time-series and longitudinal analyses*** to better understand the causal pathways by which norms influence youth agency as well as track and assess how changing normative environments reshape ***youth agency and SRH outcomes over time.***

CONTACT

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