



Validating Measures of Reproductive Empowerment in Kenya

January 2020



Validating Measures of Reproductive Empowerment in Kenya

Mahua Mandal, MPH, PhD, MEASURE Evaluation, University of North Carolina
Sarah Treves-Kagan, MPH, PhD, MEASURE Evaluation, University of North Carolina
Carolina Mejia, MPH, PhD, MEASURE Evaluation, University of North Carolina

January 2020

MEASURE Evaluation
University of North Carolina at Chapel Hill
123 West Franklin Street, Suite 330
Chapel Hill, North Carolina 27516
Phone: +1-919-445-9359
measure@unc.edu
www.measureevaluation.org

This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement AID-OAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center, University of North Carolina at Chapel Hill in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of USAID or the United States government. TR-19-340

ISBN: 978-1-64232-138-8



ACKNOWLEDGMENTS

The authors would like to acknowledge the United States Agency for International Development (USAID) for its support of this research. We are grateful to the following people for their vital assistance throughout the study: Mary Paul, Susannah Zietz, and Janine Bardon O’Fallon, at the USAID-funded MEASURE Evaluation project, and our local consultant, Jacinta Nzinga. We also thank Amani Selim, Joan Kraft, Afeefa Abdur-Rahman, and Michal Avni in the Office of Population and Reproductive Health at USAID/Washington for their support of and commitment to this study. We thank the knowledge management team at MEASURE Evaluation for editorial, design, and production services.

Cover

A mother and her children (clients of the Nanighi Health Centre) shown at their home in Garissa, Kenya. Photo: United States Agency for International Development.

Suggested citation

Mandal, M., Treves-Kagan, S., & Mejia, C. (2020). Validating Measures of Reproductive Empowerment in Kenya. Chapel Hill, NC, USA: MEASURE Evaluation, University of North Carolina.

CONTENTS

Tables	8
Figure	8
Abbreviations	9
Executive Summary	10
Introduction	13
Developing a Measure of Reproductive Empowerment	13
Study Objectives	14
Methods	15
Study Design and Sampling	15
Context	15
Study Design	15
Study Population and Area	15
Sample Size and Sampling Strategy	15
Data Collection	16
Data Analysis	16
Human Subjects Approval	17
Results	18
Demographics	18
Table 1. Participant characteristics	18
Well-Understood Items	18
Problem Items	19
Table 2. Category of difficulty for problem items (items for which 10% or more of the respondents indicated issues in responding to or interpreting the item)	20
Lexical Issues	20
Conceptual Misunderstanding	21
Lack of Information or Context	21
Table 3. Difficulties in section 1: Communication and decision making (Q01–Q08)	23
Table 4. Difficulties in section 2: Partner communication (Q09–Q13)	24
Table 5. Difficulties in section 4A: Social norms around RH decision making (Q18–Q29)	25
Table 6. Difficulties in section 4B: Critical consciousness (Q30–Q44)	27
Men’s Responses	29

Summary of Wrap-Up Questions..... 29

Adjusted Draft RE Scale..... 29

 Table 7. Adjusted draft RE scale 31

Discussion 33

Next Steps 34

References 35

Appendix A. Original Draft, Reproductive Empowerment Scale..... 37

Appendix B. Cognitive Interview Guide..... 39

TABLES

Table 1. Participant characteristics	18
Table 2. Category of difficulty for problem items (items for which 10% or more of the respondents indicated issues in responding to or interpreting the item).....	20
Table 3. Difficulties in section 1: Communication and decision making (Q01–Q08).....	23
Table 4. Difficulties in section 2: Partner communication (Q09–Q13).....	24
Table 5. Difficulties in section 4A: Social norms around RH decision making (Q18–Q29).....	25
Table 6. Difficulties in section 4B: Critical consciousness (Q30–Q44)	27
Table 7. Adjusted draft RE scale	31

FIGURE

Figure 1. Adjustment of domains from original draft RE scale to adjusted draft RE scale	30
---	----

ABBREVIATIONS

CI	cognitive interview
I	survey item
P	CI probing
RE	reproductive empowerment
RH	reproductive health
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Background

Although a substantial body of research has examined the role of empowerment in influencing reproductive outcomes, the reproductive sphere has only recently emerged as a distinct dimension of empowerment. Inconsistency in the conceptualization and measurement of reproductive empowerment (RE) has led to the use of a wide range of research measures on the determinants of reproductive behavior in relation to empowerment. We adopted the following definition of RE from a recently developed framework: “Both a transformative process and an outcome, whereby individuals expand their capacity to make informed decisions about their reproductive lives, amplify their ability to participate meaningfully in public and private discussions related to sexuality, reproductive health and fertility, and act on their preferences to achieve desired reproductive outcomes, free from violence, retribution or fear” (Edmeades, Hinson, Seban, & Murithi, 2018). MEASURE Evaluation—a project funded by the United States Agency for International Development—developed a draft RE scale using three steps. First, we conducted a systematic literature review to identify existing domains, subdomains, scales, and indexes related to RE. Second, through a consultative meeting, we shared our findings from the systematic review with experts in reproductive health (RH) and empowerment research and measurement, and sought their feedback on gaps and limitations in the field. Third, we conducted focus group discussions with men and women in Zambia to explore in depth the meaning of the identified domains and subdomains of RE, and to surface new domains and subdomains. At the end of this process, we prepared a draft RE scale with 44 items across five subscales. The next step in the development of the RE scale was to establish its face validity, the subject of this study. The objectives of this study were to (1) pretest the draft scale items using cognitive interviews (CIs) with women and men in Kenya to examine the items’ face validity; and (2) revise the draft RE scale based on the results of the CIs.

Methods

We conducted the CIs in Kenya to explore whether the draft measures were relevant in another sub-Saharan African context, where attitudes, traditions, and gender norms may be different from those in Zambia. Data were collected from women ages 15 to 49 and men ages 18 to 59 in two sites—Nairobi and Machakos—using a semi-structured interview guide. The sample size was 24 men and 72 women. Because of ethical concerns about including minors, we required that the group of 15- to 17-year-old female adolescents be married.

Each interview was led by a local interviewer who was fluent in both English and Swahili. At the beginning of the interview, respondents were asked which language they would be most comfortable using for the interview. Interviewers were matched by age group and, in most cases, by the sex of the respondent. During the interview, each participant was asked how s/he would respond to the items in the draft RE scale. The interviewer then asked the respondent to clarify how s/he interpreted the meaning of the items, focusing on the participant’s interpretation of the intention of the item as a whole and the specific phrases and words used in each item. All respondents were asked to “think aloud.” The interviewers used probes to elicit respondents’ thought processes about responding to the questions.

Results

Thirty-two of the 44 draft RE scale items were understood by 90 percent or more of respondents. For these items, respondents could respond and could articulate in Swahili, English, or a combination of both, their think-aloud process for understanding the question and formulating their response.

For the remaining 12 items, 10 percent or more of the respondents indicated that they had had problems. The problems included those related to lexicon (i.e., misunderstanding a definition in English or translation issues in Swahili); misunderstanding the intended concept; and lack of information or context for the participant to be able to respond (e.g., asking whether respondents who live far away from areas where women's rights events had taken place had participated in such events). The CIs also revealed that some respondents were unclear about the think-aloud process and could not respond to the probing questions. Although many respondents had difficulty verbalizing their thought processes when presented with an item from the RE scale, two items were identified as especially problematic because respondents did not understand the CI probes.

Based on an iterative process of analyzing results from the CIs, revisiting the literature, and discussing the CI results and the literature, we adjusted the draft RE scale by splitting the construct into six domains (RH healthcare provider communication; RH partner communication; RH decision making; RH social support; RH social norms; and critical consciousness—endorsement of RH equality). We also revised the wording of several items and reduced the RE scale to 29 items.

Discussion

This study offers an example of cognitive interviewing conducted with men and women in Kenya. To the best of our knowledge, it is the first example of CIs being used to adapt measures about RH empowerment for use in sub-Saharan Africa. Findings from this study provide unique insights on RE measurement among men and women in Kenya who have been in partnerships in the past 12 months.

Most respondents understood more than 70 percent of the 44 draft RE items, indicating that these items could be successfully answered by survey respondents if they were included in a quantitative survey. This demonstrates that the original draft RE scale had moderately high face validity.

Although the vast majority of the men understood most of the questions, the CIs with them revealed that the questions were not contextually appropriate given the gender dynamics and gender roles in this population. To validate an RE scale that is relevant for men, formative research is needed to understand the ways in which men in sub-Saharan African experience RE and the barriers they face to achieving full RE.

Respondents sometimes did not understand the cognitive interviewing process, which led to challenges in eliciting the types of responses needed for the study. Moreover, because CIs are intended to explain how respondents experience and interpret specific words and phrases, using this approach with a scale that had been conceptualized and developed in English (partly from using formative research results from Zambia), and then translating terms into Swahili for implementation of a survey in Kenya, presented complexities in both the implementation of the CI and the analysis of the data.

The research results helped the study team revise the RE scale items by providing insights on how specific words and phrases were understood and interpreted, and identifying items that were least understood.

Important modifications were made to reorganize the scale and subscales to more accurately reflect distinct domains of RE, and to simplify items so that they are better understood by respondents.

Next Steps

The next step in the development of the RE scale and its validation is testing it in a broader survey to determine how well the items correlate with each other and how well a RE variable constructed from the scale predicts an outcome of interest. The RE scale will be integrated in a survey in sub-Saharan Africa to statistically examine whether the items in each subscale “hang together,” and whether the scale is related to family planning knowledge, attitudes, and behaviors. After testing the scale in a survey, the adjusted draft RE scale may be revised again to produce a final RE scale that can be used in surveys and evaluations in sub-Saharan Africa.

INTRODUCTION

Numerous studies have demonstrated that women’s empowerment positively affects several reproductive health (RH) outcomes, including ideal family size preference (Hindin, 2000; El-Zeini, 2008; Hindin & Muntifering, 2011; McAllister, Gurven, Kaplan, & Stieglitz, 2012; Upadhyay & Karasek, 2012); birth intervals (Al Riyami & Afifi, 2003; Upadhyay & Hindin, 2005); ability to make fertility decisions (Jin, 1995; Gwako, 1997; Mason & Smith, 2000); and unintended pregnancies (Williams, Sobieszczyk, & Perez, 2000; Pallitto, Campbell, & O’Campo, 2005). However, a recent systematic literature review of women’s empowerment and fertility revealed that about one third of the studies resulted in significant inverse findings and/or non-significant associations (Upadhyay, Gipson, Withers, Lewis, Ciaraldi, Fraser, . . . Prata, 2014). This suggests that the relationship between fertility and empowerment is inconsistent or unclear across empowerment domains, and that a focus on empowerment as it is specifically linked to family planning and other sexual and reproductive health (SRH) outcomes may be useful. In recent years, this domain of empowerment has been referred to as “reproductive empowerment” (RE).

MEASURE Evaluation has adopted the following definition of RE from a recently developed framework:

Both a transformative process and an outcome, whereby individuals expand their capacity to make informed decisions about their reproductive lives, amplify their ability to participate meaningfully in public and private discussions related to sexuality, reproductive health and fertility, and act on their preferences to achieve desired reproductive outcomes, free of violence, retribution, or fear (Edmeades, Hinson, Sebany, & Murithi, 2018).

At the same time that we adopted this definition and developed a framework for RE, we identified existing RE measures by conducting a systematic review of the literature, examining studies that sought to measure RE and family planning and RH outcomes. A search of key terms from three databases resulted in 406 full-text articles that we reviewed. We abstracted data from 45 studies that created and validated their own scale, used a previously validated measure, or employed a combination of the two. Our review found that there was a need for contextually relevant measures of RE in sub-Saharan Africa (Edmeades, Hinson, Sebany, & Murithi, 2018).

Developing a Measure of Reproductive Empowerment

We developed a draft scale of RE using the following steps. First, through the literature review mentioned above, we identified domains and subdomains of RE documented in existing studies. In conjunction with the International Center for Research on Women, we shared our findings from the systematic review during a consultative meeting in Washington, DC with experts in RH and empowerment research and measurement. We discussed the domains and subdomains and related measurement issues uncovered, and received feedback on the limitations and gaps in the literature based on the work and experience of the experts (Edmeades, Hinson, Sebany, & Murithi, 2018). We then conducted focus group discussions with men and women in Zambia to explore in depth the meaning of the identified domains and subdomains of RE, and to find new domains and subdomains. We reviewed transcripts from the focus groups and developed draft survey items about attitudes, behaviors, and norms for each domain; these domains were decision making, partner communication, social norms, social support, and critical consciousness. Using an iterative process of analyzing the transcripts, reviewing the existing literature, and circulating draft items among a panel of experts, we combined some survey items and split others. At the end of this process, we created a draft RE scale with 44 items across five subscales: (1) communication and decision making (eight items); (2) partner

communication (five items); (3) social support (four items); (4) social norms around RH decision making (12 items); and (5) critical consciousness (15 items) (Paul, Mejia, Muyunda, & Munthali, 2017). (The original draft RE scale is provided in Appendix A.)

After the initial development of a scale, it is important to measure the scale's construct validity, or the degree to which a scale, index or cognitive test measures what it claims or purports to be measuring (DeVellis, 2003). One type of construct validity is face validity, which refers to the degree to which a scale subjectively appears to measure the variable or construct that it is supposed to measure (Netemeyer, Beardson, & Sharmaet, 2003). One way to establish face validity of items is through a one-on-one cognitive interviewing process wherein potential survey respondents are given the survey questions and are encouraged to think aloud as they answer the questions. This helps researchers understand how those taking the survey interpret the questions, arrive at their answers, and process information. We used cognitive interviews (CIs) with potential survey respondents to examine the face validity of the draft RE scale.

Study Objectives

The objectives of this study were to (1) examine the face validity of the draft RE scale using CIs with men and women in Kenya; and (2) revise the draft RE scale based on the results of the CIs.

METHODS

Study Design and Sampling

Context

We selected Kenya to explore whether the draft measures were relevant in another sub-Saharan African context where attitudes, traditions, and gender norms may be different from those in Zambia. According to data from the 2015 Kenya Demographic and Health Survey 39 percent of women act as the main decision maker concerning their own healthcare; 40 percent reported that this decision was made jointly with their husbands; and 21 percent said that their husbands mainly decided. Women had their first birth at a median age of 20.3 years, just slightly later than the median age at first marriage (20.2 years). Although more than one-half (53%) of married women ages 15 to 49 were currently using a modern method of family planning in Kenya, 17.5 percent of women had an unmet need for family planning (Kenya National Bureau of Statistics, Ministry of Health/Kenya, National AIDS Control Council/Kenya, Kenya Medical Research Institute, National Council for Population and Development/Kenya, and ICF International, 2015).

Study Design

One-on-one CIs were conducted with women and men in Kenya to determine whether data captured through specific survey items represented the domains and/or concepts as intended by the research team. The CIs were used to identify whether questions were consistently understood across respondents; whether the questions were related to and answers accurately described the respondents' experiences (i.e., relevancy), and whether answers reflected what the questions were designed to measure.

Study Population and Area

The study included women ages 15 to 49 and men ages 18 to 59 living in Machakos and Nairobi. We included two sites to get different perspectives from respondents living in rural (Machakos) and urban (Nairobi) areas of Kenya. The local investigator met with key stakeholders (e.g., local leaders, religious leaders, university administrators, business owners) in both sites to get buy-in and permission to recruit study respondents.

Sample Size and Sampling Strategy

We interviewed 24 men and 72 women. Because of ethical concerns about including minors, the group of 15- to 17-year-old female adolescents was required to be married.

The eligibility criteria for women were (1) the participant was 15 to 49 years old; (2) was sexually active in the past 12 months; (3) could consent to the interview and to having it audio recorded; and (4) if a female was between 15 and 17 years old, she was married. A mix of purposive sampling strategies (e.g., maximum variation and snowball sampling) was used to sample female respondents. Respondents were identified through universities, churches, markets, beauty parlors, and other common meeting places. For maximum variation sampling, we selected a sample of women from those identified in each site based on target sample sizes set for different categories of sociodemographic characteristics: educational attainment (no education or some primary, completed primary or some secondary, and completed secondary or more than secondary); ages (15 to 17 years, 18 to 24 years, and 25 to 49 years); and language preference (English and Swahili).

The eligibility criteria for men were (1) the participant was 18 to 49 years old; (2) was sexually active in the past 12 months; and (3) could consent to the interview and to having it audio recorded. We recruited eight

male partners of women already participating in the study to allow for the comparison of certain responses to questions about decision making and partner communication. We used snowball sampling to recruit the remaining 16 men.

Data Collection

Data were collected in September 2016 using a semi-structured interview guide (Appendix B). The interviews were conducted by a local consultant and three local data collectors. Before data collection, the interviewers participated in a four-day training on research ethics and the CI approach.

Each interview was led by a local interviewer who was fluent in both English and Swahili. Respondents were asked at the beginning of the interview which language they would be most comfortable using for the interview. The interviewers were matched by age group and, in most cases, by gender of the respondent. During the interview, the participant was asked how s/he would answer items on the draft RE scale. The interviewer then asked the participant to clarify how s/he interpreted the meaning of each item, focusing on the respondent's interpretation of the intention of the item, and the specific phrases and words in the item. All respondents were asked to "think aloud." Probes were used to elicit their thought processes on how they responded to the questions. For example, after the interviewer asked the participant the survey item, "Who was involved in the conversation about whether or not you use contraception?" and the participant had responded, the interviewer would then follow up with, "What does 'Who was involved' mean to you?" The think-aloud process and probes are cognitive interviewing techniques used for survey development that ask respondents to provide an account of what they are thinking as they respond to a survey item or just after responding to an item (Willis, 2015).

Data Analysis

We used several steps for the data analysis. First, audio recordings were translated into English and transcribed. Next, we read all transcripts, and for each one, we identified the survey item(s) with which the respondent had indicated s/he had difficulty based on his/her responses to the CI probes. We then developed a coding frame to enumerate the types of difficulties identified. The difficulties were categorized into language-related problems (e.g., uncertainty about definitions) and conceptual-related problems (e.g., misinterpretation of the intended concept behind a phrase or an item).

Finally, for each survey item, we calculated the percentage of respondents who indicated that they had difficulty. In cases where 10 percent or more of the respondents indicated that they had had difficulty with a survey item (referred to as "problem items"), we explored possible revisions to the items to increase their face validity. We used an iterative approach to revising survey items. First, we examined the specific words and phrases used most by respondents when responding to CI probes for items. We then revisited newly published women's empowerment literature, including empowerment subscales and the terminology and phrases used in these scales (Richardson, 2017; Seymour & Peterman, 2017). We discussed the terms and phrases used in the CIs and the literature, and whether and how various wording/phrases would or would not be appropriate to adapt to the draft RE items. Based on this process, we revised the original draft RE scale used in the CIs to create an adjusted draft RE scale.

Human Subjects Approval

The study protocol was reviewed and approved by the Office of Human Ethics at the University of North Carolina at Chapel Hill (IRB number 16-0788) and by the local institutional review board, AMREF Health Africa in Kenya.

RESULTS

Demographics

By design, three-quarters of the respondents in Machakos and Nairobi were female. Other demographic characteristics, such as educational level, age, relationship status, and preferred language for the interview, differed between Machakos and Nairobi (Table 1).

Table 1. Participant characteristics

	Machakos (rural) % (n)	Nairobi (urban) % (n)
Sex		
Female	75.00% (36)	75.00% (36)
Male	25.00% (12)	25.00% (12)
Education level		
Low (none or some primary)	54.17% (26)	4.26% (2)
Medium (completed primary or some secondary)	27.08% (13)	44.68% (21)
High (completed secondary or more than secondary)	18.75% (9)	51.06% (25)
Age group		
15–17	12.50% (6)	4.17% (2)
18–24	25.00% (12)	25.00% (12)
25–49	62.50% (30)	70.83% (34)
Relationship status		
Married/living together	68.75% (33)	81.25% (39)
Steady partner	22.92% (11)	18.75% (9)
Dating (one or more partners)	8.33% (4)	0.00% (0)
Preferred language for interview		
English	43.75% (21)	33.33% (16)
Swahili	56.25% (27)	66.66% (32)
TOTAL	48	48

Well-Understood Items

Thirty-two draft survey items were understood by 90 percent or more of the respondents. All items in the social support domain, and most items in the remaining domains, were understood by the vast majority of female and male respondents, and by the Swahili and English speakers. For these items, respondents could

respond to the draft survey item and then articulate in Swahili, English, or a combination of both, their think-aloud process for understanding the question and formulating their responses.

Problem Items

We identified a total of 12 problem items; that is, 12 items for which ten percent or more of the respondents indicated that they had had problems with the items. Three items from the communication and decision making domain, two items from the partner communication domain, two items from the social norms around RH decision making domain, and five items from the critical consciousness domain were problematic. The problems identified by the respondents were those related to lexicon (i.e., misunderstanding a definition in English or translation issues in Swahili); concepts (i.e., conceptual misunderstanding of the intended concept); and relevancy (i.e., lack of information or context for the participant to be able to respond). Table 2 summarizes the problem items and their categories of difficulty.

Respondents were also often unclear about the think-aloud process used in CI, and could not respond to the probing questions. For example, when asked, “What does ‘Who was involved’ mean to you?” about the survey item, “Who was involved in the conversation about whether or not you use contraception?”, some respondents were confused about the type of information the probe was trying to elicit. Some respondents reiterated their response to the original survey question, whereas others explained why they used contraception.

Although some respondents had difficulty with almost all survey items and probes when asked to verbalize their thought processes, two items, in particular, were identified as problematic: question 11 (You are comfortable telling your partner if you don’t feel like having sex) and question 18 (You decide when to use contraception). On question 11, some respondents conceptualized and interpreted the term “comfortable” outside the context of the question. For example, one woman interpreted “comfortable” to mean “to make your own decision.” Another woman thought it meant that she was free in her family or in her home and could do what she wanted. A third woman interpreted “comfortable” to mean “you agree to having sex without protection or anything.” After being asked question 18, respondents were asked the CI probe, “What time frame did you think of when you were asked this question?” Most respondents were confused about what “time frame” meant in the context of the CI probe. Some respondents did not understand the term “time frame” at all. Others thought that they were being asked about how long they took to answer the survey question. Some respondents thought that they were being asked specific periods of time that they used contraception, the length of time that they had contemplated using contraception, or the length of the process of getting contraception.

Table 2. Category of difficulty for problem items (items for which 10% or more of the respondents indicated issues in responding to or interpreting the item)

Problem items	Problem with survey item (I) or CI probing (P)	Problem with language: English	Problem with language: Swahili	Conceptual misunderstanding	Lack of information or context
Q02. Who was involved in the conversation about whether or not you use contraception?	I	X	X		
Q04. Were you actively involved in the conversation about whether or not to use contraception?	I	X	X	X	
Q07. In your case, who has the final say about whether or not you use contraception?	I	X	X		
Q11. You are comfortable telling your partner if you don't feel like having sex.	P				
Q12. When having conversations about sex and sexual reproductive health with your partner, he/she listens to what you have to say.	I	X	X		
Q18. You decide when to use contraception.	P				
Q26. Other women/men you know can refuse sex with their current partner if they don't want to have it.	I			X	
Q38. Husband and wife should share control over household finances.	I	X	X		
Q40. Have you discussed the need for men and women to be treated equally?	I		X		
Q42. Have you talked to your friends or family about promoting women's rights?	I		X		X
Q43. Participated in events that promote women's rights?	I		X		X
Q44. Talked to local officials about how to improve the rights of women in this community?	I		X		X

Lexical Issues

Although the majority of respondents in each study site preferred that Swahili be used during the interview, the reported language issues affected both English and Swahili speakers and interviews. Certain English terminologies were unfamiliar or misunderstood by respondents participating in English interviews. For example, the term in English, “supportive,” was not well understood in the context of question 14, “If you wanted to use contraception, your partner would be *supportive*.” Several respondents either could not explain or had difficulty explaining the term. One respondent described supportive to mean “love,” whereas another thought it meant “to volunteer.” Interestingly, respondents did not have difficulty understanding the term

“support” in question 17, “If your partner did not want you to use contraception, you have friends or family who would support you getting contraception anyway.”

Respondents who were interviewed in Swahili also had difficulty understanding certain terminology. For example, respondents did not understand the Swahili term, “being treated equally,” in the context of question 40: “How often in the last 12 months have you discussed the need for men and women to be treated equally?” When probed about its meaning, some respondents talked about “being treated equally” in conversations with peers, but not in intimate partnerships.

In addition, the concepts were sometimes inaccurate or lost in translation when the RE scale was translated from English to Swahili. For example, question 21, “You think you should be able to decide when to use contraception,” was originally translated into Swahili as, “You think you should be able to decide what time to use contraception.” This translation confused respondents and they could not answer until the translation was changed to match the intended meaning more closely.

Often language issues were identified in both Swahili and English interviews, indicating that there was an overlap between language issues and conceptual misunderstandings. For example, interviews in both English and Swahili showed that respondents were confused by the term, “final say,” in the question 7, “In your case, who has the final say about whether or not you use contraception?” Some respondents thought that “final say” meant being the head of the household or a husband contributing. Others explained why they should have the final say, but could not explain what they meant by it. One respondent thought that the government had the final say because it is responsible for procuring the best methods of contraception.

Conceptual Misunderstanding

Concepts behind a phrase in an item were misunderstood for a variety of reasons. In some cases, respondents were confused about the reference point in the item. For example, when responding to question 29, “Other people think you should be able to refuse sex if you do not want to have it,” some respondents answered this from their own perspective (i.e., whether the respondent believed s/he should be able to refuse sex if s/he does not want it). Other respondents stated that it was not other people’s business whether the respondent was having or refusing sex. Relatedly, the ambiguity of the population of reference in social norm items, such as in question 25 (“Other women/men you know use contraception even when their partners don’t want them to”) led one respondent to talk about not knowing what other people thought.

In other cases, respondents sometimes interpreted the concept behind a phrase in an item conversely from the intended meaning. For example, question 30 (“Women have less say than men over whether to use contraception”) was interpreted by two women as “there is no problem [in using contraception]”; and “men cannot deny women [from getting contraception].” This indicates that these respondents may have interpreted this item to mean, “Women have *as much say* as men to use contraception.”

Lack of Information or Context

Respondents had difficulty answering several items under the critical consciousness domain because the concept was unfamiliar to the respondent or perhaps irrelevant in the context. When respondents were asked how often in the past 12 months they talked to their friends or family about promoting women’s rights

(question 42), some respondents could not explain what “women’s rights” meant to them. Other respondents stated that “women’s rights” meant “independence” or “not abused,” indicating a familiarity with but incomplete understanding of the term. Other respondents thought it referred to family planning and its side effects. The confusion around understanding “women’s rights” was likely because the concept was not recognized among the respondents.

Similarly, when respondents were asked how often they participated in events that promoted women’s rights, some respondents did not understand the term “events,” perhaps because these types of events did not take place in their communities.

Tables 3 to 6 summarize the difficulties that respondents reported with each problem item.

Table 3. Difficulties in section 1: Communication and decision making (Q01–Q08)

Question	% (N) Problem	Problem % (N) English, Swahili	Problem % (N) female participant, male participant	Summary of difficulties
Who was involved in the conversation about whether or not you use contraception? (Q02) (N=80)	17.50% (14)	9.09% (3), 23.91% (11)	17.54% (10), 17.39% (4)	There was confusion around the phrase, "who was involved." When probed on what "involved" meant to them, most respondents described it as who participated in and/or contributed to the discussion. However, some respondents could not describe what "involved" meant to them and repeated their answers to the main question. In addition, there were alternative points of view on what involvement meant. Some respondents thought it meant who initiated the conversation, whereas others thought it meant who was most impacted by the conversation. For example, according to one participant, "I am the one who is using the contraceptive, so I am the one who is involved in the whole issue" (FM_05_02). According to another participant, "It's me especially because mostly the women are the ones who give birth, the man just impregnates, yeah" (FM_29_02). Other respondents explained why they used contraception. For example, one participant said it meant "preventing yourself from diseases and also getting pregnant" (MM_06_03).
Were you actively involved in the conversation about whether or not to use contraception? (Q04) (N=80)	25.32% (20)	15.15% (5) 33.33% (15)	24.56% (14), 27.27% (6)	There was confusion when respondents were probed about what "actively involved" meant to them and what the difference was between "being actively involved and not being actively involved." Some thought that actively involved meant agreeing with your partner, wanting to take contraceptives, having a plan to take contraceptives, being confident in taking contraceptives, or reliably taking contraceptives, whereas not being actively involved meant not agreeing with your partner, not agreeing to take contraceptives, being reluctant to take contraceptives, not being confident in taking contraceptives, or even unreliably taking contraceptives. Other respondents thought that those who were not actively involved were "less concerned about it" or not serious (FM_27_02). According to one participant, women should be actively involved and men should not be actively involved because "he is not the one using family planning and you are the one who knows its effects and he doesn't, so for him it's not a big deal" (FM_24_02). Others thought that being actively involved meant initiating the conversation. Other respondents thought that being actively involved meant that they had a choice of contraceptive to use and not being actively involved meant that their partner made the decision and he/she went along with it. Conversely, another participant thought

Question	% (N) Problem	Problem % (N) English, Swahili	Problem % (N) female participant, male participant	Summary of difficulties
				that being actively involved is being forced and not actively involved is volunteering yourself to use contraception. One male participant thought that it meant being actively involved in sexual intercourse.
In your case, who has the final say about whether or not you use contraception? (Q07) (N=95)	16.84% (16)	13.89% (5) 18.97% (11)	12.50% (9), 30.43% (7)	There was difficulty in understanding the term, "final say," especially in Swahili ("Sauti Zaidi"). Although most thought that it meant having the power over making the decision (either in the hands of one person or in the couple jointly), some thought that "final say" meant being the head of the household or a husband contributing. In addition, others explained why they should have the final say, but did not say what they meant by it. One participant thought that the government has the final say because it is responsible for procuring the best methods of contraception.

Table 4. Difficulties in section 2: Partner communication (Q09–Q13)

Question	% (N) Problem	Problem % (N) English, Swahili	Problem % (N) female participant, male participant	Comments
You are comfortable telling your partner if you don't feel like having sex. (Q11) (N=96)	18.75% (18)	19.44% (7), 18.64% (11)	16.67% (12), 25.00% (6)	There was difficulty understanding the meaning of "comfortable" when probed. Some respondents understood "comfortable" outside the context of the question. They saw "comfortable" as meaning "to make your own decision" (FM_30_02), or that "I am free in my family or in my home and I can do what I want" (MM_09_03), or "means you agree to having sex without protection or anything" (FN_11_01), or "everything is working right and you're in a good state" (FN_01_01). The question was also seen as being sensitive by a few respondents and they refused to answer.
When having conversations about sex and sexual reproductive	14.58% (14)	13.89% (5), 15.25% (9)	12.50% (9), 20.83% (5)	When probed on what "listen" means to them, there was difficulty with comprehension. Some respondents thought that it meant "that my own decision should remain the only decision" (FM_27_02)," or that "he is ready for your decision" (FM_12_02), or that they "agree in what we are talking about" (FM_28_02). Other respondents did not understand the probe at all and did not give a response.

Question	% (N) Problem	Problem % (N) English, Swahili	Problem % (N) female participant, male participant	Comments
health with your partner, he/she listens to what you have to say. (Q12) (N=96)				

Table 5. Difficulties in section 4A: Social norms around RH decision making (Q18–Q29)

Question	% (N) Problem	Problem % (N) English, Swahili	Problem % (N) female participant, male participant	Comments
You decide when to use contraception. (Q18) (N=58)	41.38% (24)	25.00% (6), 52.94% (18)	52.38% (22), 12.50% (2)	Most of the confusion about the question had to do with when the respondents were probed on what "time frame" they thought about when answering the question. Some respondents were simply confused about the phrase, "time frame." Others thought it meant how long they took to answer the question. Other respondents thought it meant when they take contraception, such as "during the unsafe days" (FM_27_02) or "I have given birth, maybe the period after birth that is when I can start using contraceptives" (FM_06_02). Other respondents thought it was how long they had thought of using contraception, "I thought for a long time until I got stress," or the length of the process of getting on contraception, "it means the time you take to get a method that is suitable to use" (FM_28_02).

Question	% (N) Problem	Problem % (N) English, Swahili	Problem % (N) female participant, male participant	Comments
Other women/men you know can refuse sex with their current partner if they don't want to have it. (Q26) (N=58)	10.34% (6)	12.50% (3), 8.82% (3)	11.90% (5), 6.25% (1)	<p>Most of the respondents who were confused gave their own perspective instead of that of other women/men, essentially repeating question 11.</p> <p>Others refused to answer because it was not their experience: "I don't know about their decisions now" (MM_10_03), or others gave answers that were general, not specific to women/men they know.</p>
Other people think you should be able to refuse sex if you don't want to have it. (Q29) (N=58)	21.05% (12)	21.74% (5), 20.59% (7)	26.83% (11), 6.25% (1)	<p>Most respondents who were confused had a difficult time describing what others think, either not being able to answer or saying that it was none of their business: "I disagree, how will they know the way we have spoken inside there? How will they know if we have spoken and I don't give away my secrets outside?" According to another participant, "I am the only one who can decide or refuse" (FN_10_01).</p> <p>Another participant thought that there was no monolithic "other people": "Not all of them think like the others... Everyone has their own thinking" (MM_09_03).</p> <p>Others thought that it meant that other people should be able to dictate whether you can refuse sex when you don't want to have it. According to one participant, "It's about me and my partner, so why should they interfere with whether I want to have sex with him or not [laughs]?" (FN_34_01).</p>

Table 6. Difficulties in section 4B: Critical consciousness (Q30–Q44)

Question	% (N) Problem	Problem % (N) English, Swahili	Problem % (N) female participant, male participant	Comments
Husband and wife should share control over household finances. (Q38) (N=38)	18.42% (7)	16.67% (2), 20.00% (5)	26.83% (11), 6.25% (1)	There was some confusion about the meaning of "household finances." Some answered the question, but then admitted that they did not understand the meaning of "household finances." When probed on the meaning of "household finances," some respondents continued to explain their answer whether a husband and wife should share control over them, but not answer exactly what they think "household finances" were.
Have you discussed the need for men and women to be treated equally? (Q40) (N=38)	26.32%(10)	0.00% (0), 40.00% (10)	33.33% (10), 0% (0)	All respondents that had difficulty with this question did not understand when probed what "being treated equally" meant. All respondents who were confused took the survey in Swahili. When probed, some respondents talked about "being treated equally" in conversations with peers, but not in intimate partnerships.
Have you talked to your friends or family about promoting women's rights? (Q42) (N=38)	26.32% (10)	8.33% (1), 36.9% (9)	30.00% (9), 12.50% (1)	When probed about the meaning of "promoting women's rights," respondents were confused. Some thought "promoting women's rights" meant "to agree with women's rights" (FM_12_02). A few respondents thought that women's rights were contraceptive methods: "To me it means those methods, how you can talk about them... the goodness and the effects" (FM_24_02). Other respondents were confused about the concept of women's rights. They thought that it meant for women not to be abused or mistreated. Other respondents said that they did not understand the meaning of "women's rights."
Participated in events that promote women's	44.74% (17)	0.00% (0), 68.00% (17)	43.33% (13), 50.00% (4)	When probed, respondents did not understand what an "event" meant in this context. All these respondents received the survey in Swahili. Although some understood it correctly to mean workshops or meetings, others thought it meant results or outcomes, or did not understand it, in general.

Question	% (N) Problem	Problem % (N) English, Swahili	Problem % (N) female participant, male participant	Comments
rights? (Q43) (N=38)				
Talked to local officials about how to improve the rights of women in this community? (Q44) (N=38)	13.6% (5)	8.33% (1), 16.00% (4)	16.67%(5), 0.00% (0)	Some respondents were confused by the term, "local officials." It was unclear whether they were from the government or a community leader, like a Sheik or village elder. A few respondents thought that it was a place, like a market or health center/dispensary.

Men's Responses

Although male respondents had difficulty with only six of the problem RE items (questions 4, 7, 11, 12, 18, and 43), during the think-aloud process, men often discussed other items that did not make sense for them to answer. For example, for question 26, “Other men you know can refuse sex with their current partner if they don’t want to have it,” one man commented on how unusual it would be for a man to be the one in a relationship to refuse sex with his wife or girlfriend. For other items, such as question 11, “You have participated in events that promote women’s rights,” and question 14, “If you wanted to use contraception, your partner would be supportive,” some men laughed, likely because either the question was not contextually appropriate (question 11) or because of the assumption that a female partner’s support mattered (to the man) in the situation described.

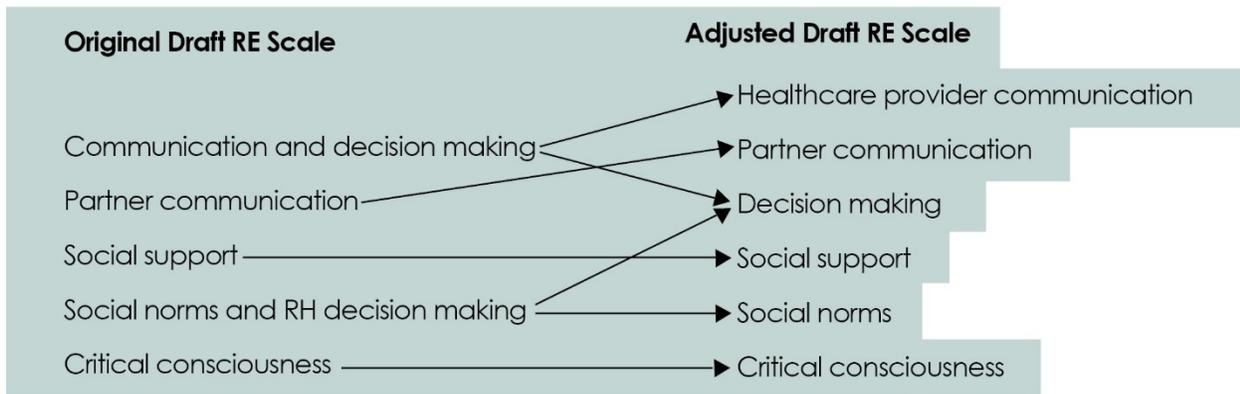
Summary of Wrap-Up Questions

When asked whether there was anything unclear about the questions in the survey, anything that made them feel uncomfortable, or any questions that were not relevant, the vast majority of respondents responded “no.” Two female respondents thought that the question about participating in events that promote women’s rights (question 43) was not relevant. Another respondent explained that she was not uncomfortable with the questions because the interviewer was a woman and that she would have been uncomfortable if the interviewer had been a man. However, three respondents reported that they were uncomfortable with questions about whether it was a right to refuse sex. Two female respondents mentioned that they felt uncomfortable when asked whether it was easier for her to obtain contraception in secret (question 13). Three respondents said that some questions were not relevant to them because they were repetitive. “For example, you can have sex if your partner does not want to or refuse sex if you don’t want to. I don’t know why you are repeating the question. Because it’s a lot. And the difference is something very small” (MM_02_03).

Adjusted Draft RE Scale

Based on an iterative process of analyzing the results from the CIs, revisiting the literature around measurement of RH and related constructs, and examining the draft RE scale in light of the results of the CIs and existing literature, we adjusted the draft RE scale by reorganizing the RE domains and items. We split the construct into six domains: RH healthcare provider communication; RH partner communication; RH decision making; RH social support; RH social norms; and critical consciousness—endorsement of RH equality. A new domain of RH healthcare provider communication was created because five items from the original draft RE subscale of communication and decision making domain (questions 2, 3, 4, 7, and 8) included healthcare workers as a response option; and when answering the questions, four to fifteen percent of respondents selected that option. Figure 1 shows how domains in the original draft scale were revised for the adjusted draft scale.

Figure 1. Adjustment of domains from original draft RE scale to adjusted draft RE scale



We also revised the wording of many items and reduced the scale to 29 items. The main reasons for altering the wording of the items were as follows:

1. Items for which respondents lacked information needed for a response
2. Items with unclear or ambiguous terms
3. Items not measuring the intended construct/domain
4. Items measuring constructs that were inapplicable or irrelevant to many respondents

Table 7 presents the adjusted draft RE scale.

Table 7. Adjusted draft RE scale

RH Healthcare Provider Communication

For each statement, please state if you “strongly agree,” “agree,” “disagree,” or “strongly disagree.”

1. You and your healthcare provider talk about using contraception.
2. You can initiate conversations about using contraception with your healthcare providers.
3. You can ask your healthcare provider questions about using contraception.
4. You can share your opinions about using contraception with your healthcare providers.
5. When discussing contraception with your healthcare provider, s/he pays attention to what you have to say.

RH Partner Communication

For each statement, please state if you “strongly agree,” “agree,” “disagree,” or “strongly disagree.”

6. You can initiate conversations about using contraception with your partner.
7. You can share your opinions about using contraception with your partner.
8. You can share your opinions about how many children you want to have with your partner.
9. You can tell your partner that you don't feel like having sex without him getting angry, violent, or threatening to leave.
10. When having conversations about sex and sexual reproductive health with your partner, he/she pays attention to what you have to say.
11. It is easier for you to get contraception in secret rather than to try to talk with your partner to get his approval.

RH Decision Making

For each statement, please state if you “strongly agree,” “agree,” “disagree,” or “strongly disagree.”

12. You can use contraception even if your partner doesn't want you to.
13. You can refuse sex with your partner if you don't want to have sex.

Please answer “yes” or “no.”

14. In your most recent conversations about whether or not to use contraception, was a decision made?

Please answer “agree” or “disagree.”

15. Did you agree or disagree with the decision about whether or not to use contraception?

Please answer with one of the following options:

- “Myself”
- “My partner”
- “My partner and myself jointly”
- “My parents”
- “My partner's parents”
- “Another family member”
- “Healthcare provider”
- “Other (specify)”
- “Don't know”

16. Who makes the final decision about whether or not you use contraception?
17. Who do you want to make the final decision about whether or not you use contraception?

RH Social Support

For each statement, please state if you “strongly agree,” “agree,” “disagree,” or “strongly disagree.”

18. If your partner did not want you to use contraception, you have a friend or family member who could help you convince your partner that you should use contraception.
19. If your partner did not want you to use contraception, you could go to people in your community who know about contraception and they could help you convince your partner that you should use contraception.
20. If your partner did not want you to use contraception, you have friends or family who would support you getting contraception anyway.

RH Social Norms

For each statement, please state if you “strongly agree,” “agree,” “disagree,” or “strongly disagree.”

21. Friends or family members you are close to can decide when they want to use contraception.
22. Friends or family members you are close to use contraception even when their partner does not want them to.
23. Friends or family members you are close to think you should be able to decide when to use contraception.
24. You would be shocked or surprised if a friend or family member you are close to told you she refused sex with her partner because she does not feel like having sex.
25. Friends or family members you are close to would be shocked or surprised if they knew that you refused sex with your partner because you did not feel like having sex.

Critical Consciousness—Endorsement of RH Equality

For each statement, please state if you “strongly agree,” “agree,” “disagree,” or “strongly disagree.”

26. Women should have less say than men over using contraception.
27. Wives should not be considered their husband’s property.
28. Women should be able to initiate sex with their partners.
29. Women should be able to refuse sex with their partners without fear of their partners getting angry, violent, or threatening to leave.

DISCUSSION

This study offers an example of cognitive interviewing conducted with men and women in Kenya. To the best of our knowledge, it is the first example of CIs being used to adapt measures about RH empowerment for use in sub-Saharan Africa. Findings from this study provide unique insights on RE measurement among men and women in Kenya who have been in partnerships in the past 12 months.

Most respondents understood more than 70 percent of the 44 draft RE items, indicating that these items could be successfully answered by survey respondents if they were included in a quantitative survey. This gives confidence that responses to these RE items would provide valid data to measure the level of RE in a sample, and many of these items were retained in the revised version of the scale.

Some survey items caused discomfort among respondents. For example, some respondents did not want to answer such items as, “You are comfortable telling your partner if you don’t want to have sex.” Even when they answered such personal questions, they were reluctant to continue discussing the item and concept openly, often providing terse responses.

Although most of the men understood most of the questions, the CIs with them indicated that the questions were not contextually appropriate given the gender dynamics and gender roles in this population. To validate an RE scale that is relevant for men, formative research is needed to understand the ways in which men in sub-Saharan African experience RE and the barriers they face to achieving full RE.¹ Some barriers are likely at more distal levels, such as national and institutional policies, and may not be captured well via a scale or survey.

Because CIs are intended to explain how respondents experience and interpret specific words and phrases, using this approach with a scale that had been conceptualized and developed in English and then translated into another language presented complexities in both the implementation of the interviews and the analysis of the data. The RE scale was developed based on a global literature review and focus group discussions in Zambia to better understand RE concepts that were documented in the literature and new concepts not yet documented. The RE domains, subdomains, and items were ultimately developed in English and translated into Swahili for the CIs. The manner in which Zambians view and interpret RE-related concepts may be quite different from the way Kenyans view RE-related concepts; therefore, the construct and language used to describe the domains and overall constructs in Kenya may not align with the understanding, interpretation, and language used around RE in Zambia. For future research on developing and validating latent constructs, we suggest that all steps of primary data collection (i.e., focus group discussions, CIs, and the final steps of survey administration) be implemented in one country.

One objective of this study was to assess the face validity of the original draft RE scale. With more than two-thirds of the scale items being understood by CI respondents, the original draft RE scale had moderately high face validity. A second objective was to inform the adaptation of RE measures in sub-Saharan Africa to increase their validity and so that they can be integrated in broader surveys and evaluations in the region. The results helped the study team revise the scale items by providing insight on how specific words and phrases were understood and interpreted, and identifying the items that were least understood. Incorporating specific words and phrases used in CIs into scale items likely increased the face validity of the revised draft RE scale. Important modifications were made to reorganize the scale and subscales to more accurately reflect the distinct domains of RE, and to simplify items so that they will be better understood by future survey respondents.

¹ Formative research with men in Zambia was limited to asking about issues concerning women's, not men's RE.

NEXT STEPS

The next step in the development of the RE scale and its validation is testing it in a broader survey to assess how well the items correlate with each other and how well a RE variable constructed from the scale predicts an outcome of interest. The RE scale will be integrated in a survey in sub-Saharan Africa to statistically examine whether the items in each subscale “hang together,” and whether the scale is related to family planning knowledge, attitudes, and behaviors. Based on results from testing the scale in a survey, the adjusted draft RE scale may be revised again to produce a final RE scale that can be used in surveys and evaluations in sub-Saharan Africa.

REFERENCES

- Al Riyami, A., & Afifi, M. (2003). Women empowerment and marital fertility in Oman. *Journal of the Egyptian Public Health Association*, 78(1–2), 55. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/17219911>.
- DeVellis, R. F. (2003). *Scale development: Theory and application*. Thousand Oaks, CA, USAID: Sage Publications.
- Edmeades, J., Hinson, L., Sebany, M., & Murithi, L. (2018). *A conceptual framework for reproductive empowerment: Empowering individuals and couples to improve their health*. Washington, DC, USA: International Center for Research on Women. Retrieved from <https://www.icrw.org/publications/framework-for-reproductive-empowerment-brief/>.
- El-Zeini, L.O. (2008). The path to replacement fertility in Egypt: Acceptance, preference, and achievement. *Studies in Family Planning*, 39(3), 161–176. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/18853638>.
- Gwako, E. L. M. (1997). Conjugal power in rural Kenya families: Its influence on women's decisions about family size and family planning practices. *Sex Roles*, 36(3–4), 127–147. Retrieved from <https://link.springer.com/article/10.1007/BF02766264>.
- Hindin, M. J. (2000). Women's autonomy, women's status and fertility-related behavior in Zimbabwe. *Population Research and Policy Review*, 19(3), 255–282. Retrieved from https://www.jstor.org/stable/40230270?seq=1#page_scan_tab_contents.
- Hindin, M. J., & Muntifering, C. J. (2011). Women's autonomy and timing of most recent sexual intercourse in sub-Saharan Africa: A multi-country analysis. *Journal of Sex Research*, 48(6), 511–519. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/21318922>.
- Jin, H. (1995). A study of rural women's decision-making power on reproduction and fertility. *Chinese Journal of Population Science*, 7(3), 241–257. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/12290860>.
- Kenya National Bureau of Statistics, Ministry of Health/Kenya, National AIDS Control Council/Kenya, Kenya Medical Research Institute, National Council for Population and Development/Kenya, and ICF International. (2015). *Kenya demographic and health survey 2014*. Rockville, MD, USA: Kenya National Bureau of Statistics, Ministry of Health/Kenya, National AIDS Control Council/Kenya, Kenya Medical Research Institute, National Council for Population and Development/Kenya, and ICF International. Retrieved from <https://dhsprogram.com/pubs/pdf/fr308/fr308.pdf>.
- Mason, K.O., & Smith, H.L. (2000). Husbands' versus wives' fertility goals and use of contraception: The influence of gender context in five Asian countries. *Demography*, 37(3), 299–311. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/10953805>.
- McAllister, L., Gurven, M., Kaplan, H., & Stieglitz, J. (2012). Why do women have more children than they want? Understanding differences in women's ideal and actual family size in a natural fertility population. *American Journal of Human Biology*, 24(6), 786–799. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3806294/>.
- Netemeyer, R. G., Bearden, W.O., & Sharmaet, S. (2003). *Scaling procedures: Issues and applications*. Thousand Oaks, CA, USA: Sage Publications. Retrieved from <https://provinnie-5f1d2.firebaseio.com/24/Scaling-Procedures-Issues-and-Applications.pdf>.

- Pallitto, C.C., Campbell, J.C., & O'Campo, P. (2005). Is intimate partner violence associated with unintended pregnancy? A review of the literature. *Trauma, Violence, & Abuse*, 6(3), 217–235. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/16237156>.
- Paul, M., Mejia, C., Muyunda, B., & Munthali L. (2017). *Developing measures of reproductive empowerment: A qualitative study in Zambia* (tr-17-185-en.pdf). Chapel Hill, NC, USA: MEASURE Evaluation, University of North Carolina. Retrieved from <https://www.measureevaluation.org/resources/publications/tr-17-185>.
- Richardson, R. A. (2017). Measuring women's empowerment: A critical review of current practices and recommendations for researchers. *Social Indicators Research*, 137(4), 539–557. Retrieved from https://www.researchgate.net/publication/315944292_Measuring_Women's_Empowerment_A_Critical_Review_of_Current_Practices_and_Recommendations_for_Researchers.
- Seymour, G. & Peterman, A. (2017). *Understanding the measurement of women's autonomy: Illustrations from Bangladesh and Ghana*. Washington, DC, USA: International Food Policy Research Institute. Retrieved from <http://www.ifpri.org/publication/understanding-measurement-womens-autonomy-illustrations-bangladesh-and-ghana>.
- Upadhyay, U.D., Gipson, J.D., Withers, M., Lewis, S., Ciaraldi, E.J., Fraser, A., . . . Prata, N. (2014). Women's empowerment and fertility: A review of the literature. *Social Science & Medicine*, 115, 111–120. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/24955875>.
- Upadhyay, U.D., & Hindin, M.J. (2005). Do higher status and more autonomous women have longer birth intervals?: Results from Cebu, Philippines. *Social Science & Medicine*, 60(11), 2641–2655. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/15814188>.
- Upadhyay, U.D., & Karasek, D. (2012). Women's empowerment and ideal family size: An examination of DHS empowerment measures in sub-Saharan Africa. *International Perspectives on Sexual and Reproductive Health*, 38(2), 78–89. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/22832148>.
- Williams, L., Sobieszcyk, T., & Perez, A. (2000). Couples' views about planning fertility in the Philippines. *Rural Sociology*, 65(3), 484–514. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1549-0831.2000.tb00040.x>.
- Willis, G. B. (2015). *Analysis of the cognitive interview in questionnaire design*. New York, NY, USA: Oxford University Press.

APPENDIX A. ORIGINAL DRAFT, REPRODUCTIVE EMPOWERMENT SCALE

Communication and decision making

1. Have you and your current partner ever talked about using contraception?
2. Who was involved in the conversation about whether or not you use contraception?
3. Who initiated the conversation about whether or not you use contraception?
4. Were you actively involved in the conversation about whether or not to use contraception?
5. Was a decision made during the conversation about whether or not to use contraception?
6. Did you agree or disagree with the decision about whether or not to use contraception?
7. In your case, who has the final say about whether or not you use contraception?
8. Who do you want to have the final say about whether or not you use contraception?

Partner communication

9. Have you and your partner ever talked about how many children you want to have?
10. You initiate conversations about using contraception with your partner(s).
11. You are comfortable telling your partner if you don't feel like having sex.
12. When having conversations about sex and reproductive health with your partner, s/he listens to what you have to say.
13. It is easier for you to get contraception in secret rather than to try to talk with your partner to get his/her approval.

Social support

14. If you wanted to use contraception, your partner would be supportive.
15. If your partner did not want you to use contraception, you have a friend or family member who could help you convince your partner you should use contraception.
16. If your partner did not want you to use contraception, you could go to people in your community who know about contraception and could help you convince your partner that you should use contraception.
17. If your partner did not want you to use contraception, you have friends or family who would support you getting contraception anyway.

Social norms around SRH decision making

18. You decide when to use contraception.
19. You can use contraception even if your partner doesn't want you to.
20. You can refuse sex with your partner if you don't want to have it.
21. You think you should be able to decide when to use contraception.
22. You think you should be able to use contraception, even if your partner doesn't want you to.
23. You think you should be able to refuse sex with your current partner if you don't want to have it.

24. Other women/men you are close to can decide when they want to use contraception.
25. Other women/men you know use contraception even when their partner don't want them to.
26. Other women/men you know can refuse sex with their current partner if they don't want to have it.
27. Other people think you should be able to decide when to use contraception.
28. Other people think you should be able to use contraception even when your partner doesn't want you to.
29. Other people think you should be able to refuse sex if you don't want to have it.

Critical consciousness

30. Women have less say than men over whether to use contraception.
31. Women have fewer opportunities than men.
32. Husbands have more control over money than their wives, even when their wives earn it.
33. Wives are viewed as their husband's property if the husband's family has paid bride-price.
34. Women who initiate sex with their partners are seen as being promiscuous.
35. Women should have the final say over contraception.
36. Men and women should have the same educational opportunities.
37. Wives shouldn't be considered their husband's property.
38. Husband and wife should share control over household finances.
39. Women should be able to initiate sex with their partners.

How often in the last 12 months...

40. Have you discussed the need for men and women to be treated equally?
41. Have you talked to your friends or family (not including partner) about contraception?
42. Have you talked to your friends or family about promoting women's rights?
43. Participated in events that promote women's rights?
44. Talked to local officials about how to improve the rights of women in this community?

APPENDIX B. COGNITIVE INTERVIEW GUIDE

Participant ID # _____ Interviewer ID: _____ Sex: _____ Interview start time: _____: _____

Developing and Validating Measures of Reproductive Empowerment

[→ Turn ON digital recorder]

[Explain procedures of cognitive interviewing to participant]

Before starting the interview, I want to explain the process of what we are going to be doing. This interview is like a survey but different in that I am going to be asking some question, you will give me an answer and I will ask you a few more questions to find out how you got to your answer. I am going to encourage you to think aloud – to know how you got to your answer. Some of the questions may appear repetitive. There are no right or wrong answers. Your feedback will help us improve the survey questions.

Some common difficulties

- 1) Did not understand question
- 2) Unclear answer choices
- 3) Confused by wording
- 4) Questions sounds repetitive
- 5) Problem with recall

Section 1: Communication and decision-making

[Instructions for respondent]: First, I am going to ask you about communication and the process of making decisions.

Questions/Statements	Answers	Probes	Overall feedback – to be filled in by interviewer
1. Have you <u>and your current partner</u> ever talked about using contraception ?	<input type="checkbox"/> 1. Yes <input type="checkbox"/> 0. No [Go to Q. #7] <input type="checkbox"/> 8. Can't remember <input type="checkbox"/> 9. Refused to answer	What does “contraception” mean to you? [Explain] What I mean when I say “contraception” is: use of modern contraceptives or natural methods to limit or space pregnancies. Modern methods of contraception include the pill, female and	Respondent had difficulty responding the question: <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>

		<p>male sterilization, IUD, injectables, implants, male and female condom, diaphragm, and emergency contraception. Traditional methods include periodic abstinence, withdrawal and folk methods.</p>	
<p>[Instructions]: For the next several questions think about the most recent conversations that you have had about whether or not to use contraception.</p>			
<p>In the most recent conversation:</p> <p>2. <u>Who was involved</u> in the conversation about whether or not you use contraception?</p> <p>[Let participant answer first and then read aloud the options.]</p>	<p><input type="checkbox"/> 1. Myself <input type="checkbox"/> 2. My partner <input type="checkbox"/> 3. My parents <input type="checkbox"/> 4. My partner's parents <input type="checkbox"/> 5. Another family member <input type="checkbox"/> 6. Healthcare provider <input type="checkbox"/> 7. Other (specify): 7a. _____ <input type="checkbox"/> 8. Don't know <input type="checkbox"/> 9. Refused to answer</p> <p>[Select all that apply]</p>	<ul style="list-style-type: none"> • What does "<u>who was involved</u>" mean to you? • Would you mind saying who the other family member is (if they said other family member)? • Would some of the people on the list <u>never</u> be involved? 	<p>Respondent had difficulty responding the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <p>_____</p> <p>_____</p>
<p>In the most recent conversation:</p> <p>3. <u>Who initiated</u> the conversation about whether or not you use contraception?</p>	<p><input type="checkbox"/> 1. Myself <input type="checkbox"/> 2. My partner <input type="checkbox"/> 3. My parents <input type="checkbox"/> 4. My partner's parents <input type="checkbox"/> 5. Another family member <input type="checkbox"/> 6. Healthcare provider <input type="checkbox"/> 7. Other (specify): 7a. _____ <input type="checkbox"/> 8. Don't know <input type="checkbox"/> 9. Refused to answer</p> <p>[Select all that apply]</p>	<p>How did [that person] initiate the conversation?</p> <p>Would you mind saying who the other family member is (if they said other family member)?</p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <p>_____</p> <p>_____</p>

<p>In the most recent conversation:</p> <p>4. Were you <u>actively involved</u> in the conversation about whether or not to use contraception?</p>	<p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 0. No <input type="checkbox"/> 9. Refused to answer</p>	<p><i>How were you involved?</i></p> <p><i>What does “actively involved” mean to you?</i></p> <p><i>Is there a difference is between being “actively involved” and “not being actively involved”?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>In the most recent conversation:</p> <p>5. Was a <u>decision made</u> during the conversation about whether or not to use contraception?</p>	<p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 0. No <input type="checkbox"/> 9. Refused to answer</p>	<p><i>(If yes), was the decision made during the conversation or had a decision already been made <u>before</u> the conversation?</i></p> <p><i>(If not), why not? Did you talk about when you might decide?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>

<p>8. <u>Who do you want to have the final say about whether or not you use contraception?</u></p>	<p> <input type="checkbox"/> 1. Myself <input type="checkbox"/> 2. My partner <input type="checkbox"/> 3. My parents <input type="checkbox"/> 4. My partner's parents <input type="checkbox"/> 5. Another family member <input type="checkbox"/> 6. Healthcare provider <input type="checkbox"/> 7. Other (specify): 7a. _____ <input type="checkbox"/> 8. Don't know <input type="checkbox"/> 9. Refused to answer </p> <p><i>[Select all that apply]</i></p>	<p><i>Are there other people that should be listed as answer options?</i></p> <p><i>Or would you say that you should seriously consider that person's opinion as you make a decision about using contraception?</i></p>	<p>Respondent had difficulty answering the question:</p> <p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: </p> <hr/> <hr/>
--	--	--	---

[Section 2: Partner Communication]

[Instructions]: Next, I am going to continue with some statements about communicating with your partner. Please remember to tell me what you're thinking (think aloud) and if anything is difficult to answer.

Questions/Statements	Answers	Probes	Overall feedback – to be filled in by interviewer
<p>9. Have you and your partner ever talked about <u>how many children you want to have?</u></p>	<p> <input type="checkbox"/> 1. Yes <input type="checkbox"/> 0. No <input type="checkbox"/> 9. Refused to answer </p>	<p><i>(If yes) Would you please briefly describe the conversation?</i></p> <p><i>Did you agree or disagree on the number of children?</i></p> <p><i>Were you comfortable with the decision?</i></p>	<p>Respondent had difficulty answering the question:</p> <p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: </p> <hr/> <hr/>

		<p><i>Was the discussion about children separate than the discussion about contraception? In what ways?</i></p> <p><i>How frequently have you had this conversation about the number of children to have?</i></p>	
<p><i>For each statement, please tell me if you “agree, “strong agree”, “disagree”, or “strongly disagree.”</i></p> <p>10. You initiate conversations about using contraception with your partner(s).</p>	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p><i>Can you give an example of when you initiated this conversation?</i></p> <p><i>If disagree, is this something you would never initiate, even if you wanted to use contraception?</i></p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>
<p>11. You are comfortable telling your partner if you don’t feel like having sex.</p>	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p><i>What did you say? What did your partner say?</i></p> <p><i>What does “comfortable” mean to you?</i></p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>
<p>12. When having conversations about sex and sexual reproductive health with your</p>	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p><i>What does it mean, to “listen” to what you have to say?</i></p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:

partner, he/she listens to what you have to say.		<ul style="list-style-type: none"> Does it mean just listening without interrupting? Or does it mean something more than that? What? 	<hr/> <hr/>
13. It is easier for you to get contraception in secret rather than to try to talk with your partner to get his/her approval.	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<i>What does in “in secret” mean to you? Is there a better way to say this?</i>	Respondent had difficulty answering the question: <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>

[Section 3: Social support] <i>[Instructions] For the next set of statements, I am going to ask you about the social support you think you would need to get contraception. These statements are a bit different than the previous ones. Please remember to tell me what you’re thinking (think aloud) and if anything is difficult to answer. I am interested in your suggestions on how to ask the statements better so I may try rephrasing or repeat some of them. For each statement, I would like to find out whether you “agree, “strongly agree”, disagree”, or “strongly disagree.”</i>			
Questions/Statements	Answers	Probes	Overall feedback – to be filled in by interviewer
14. If you wanted to use contraception, your partner would be <u>supportive</u> .	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<i>What does ‘supportive’ mean to you?</i> <i>Based on her answer: Can you give me specific examples of how a husband is/is</i>	Respondent had difficulty answering the question: <input type="checkbox"/> 0.No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>

		<i>not supportive?</i>	
<p>15. If your partner did not want you to use contraception, you have a friend or family member who could help you convince your partner to you should use contraception.</p>	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p><i>How did you come up with your answer?</i></p> <p><i>Is it important to you to have the support of others when it comes to getting contraception?</i></p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0.No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>

<p>16. If your partner did not want you to use contraception, you could go to people in your community who know about contraception and could help you convince your partner that you should use contraception.</p> <p>[Note: for community member = community health workers, counselors, or others]]</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>What do you think people in your community would say to convince your partner?</i></p> <p><i>What types of people did you consider when answering this question?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>17. If your partner did not want you to use contraception, you have friends or family <u>who would support you</u> getting contraception anyway.</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p>What kind of support would the people give you?</p> <p>Do you think this question is the same as or different from the question (#15) about getting help from someone to convince your partner that you should use contraception?</p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0.No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>

[SELECT WHICH SECTION COMES NEXT by drawing slip from envelope to find out which section you are going to use—4A or 4B.]

Section 4A: Social norms around SRH decision-making

Individual behavior/self-efficacy (one's belief in one's ability to succeed in specific situations or accomplish a task).

[Instructions]: Similar to the previous section for each statement, please tell me if you “agree, “strongly agree”, disagree”, or “strongly disagree.”

Questions/Statement	Answers	Probes	Overall feedback – to be filled in by interviewer
18. <u>You decide</u> when to use contraception.	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<i>What time frame did you think of when we asked you this question?</i>	Respondent had difficulty answering the question: <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>
19. <u>You can</u> use contraception even if your partner doesn't want you to.	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<i>Do you think this is different from the question about using contraception in secret --- as a secret from you partner? If yes, how so?</i>	Respondent had difficulty answering the question: <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>
20. <u>You can</u> refuse sex with your partner if you don't want to have it.	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	What happens when you tell your partner you don't want to have sex? <i>If agree, how would you tell him / her?</i> <i>If disagree, what would prevent you from refusing?</i>	Respondent had difficulty answering the question: <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>

Personal attitude (what the respondent believes s/he should do)

[Instructions]: Similar to the previous section for each statement, please tell me if you “agree, “strongly agree”, disagree”, or “strongly disagree”

<p>21. <u>You think you should be able to decide when to use contraception</u></p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>Tell me why you agree (or disagree)?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>22. <u>You think you should be able to use contraception, even if your partner doesn't want you to.</u></p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>Tell me why you agree (or disagree)?</i></p> <p><i>[Continue to prompt if participant continues to be undecided]</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>23. <u>You think you should be able to refuse sex with your current partner if</u></p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree</p>	<p><i>Tell me why you agree (or disagree)?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No</p>

<p>you don't want to have it.</p>	<p><input type="checkbox"/> 4. Strongly disagree</p>		<p><input type="checkbox"/> 1. Yes. <i>If selected, describe what was difficult:</i></p> <hr/> <hr/>
-----------------------------------	--	--	--

Empirical expectations (what the respondent believes others do)

[Instructions]: For the following statement think of a few of people you are closest to. They could be friends or family members.

<p>24. Other women/men you are close to can decide when they want to use contraception</p> <p>(For male respondents ask about “other men” and for female respondents ask about “other women”)</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>Who were thinking of here? was it a friend, neighbor etc.?</i></p> <p><i>Tell me why you agree (or disagree)?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>25. Other women/men you know use contraception even when their partners don’t want them to.</p> <p>(For male respondents ask about “other men” and for female respondents ask about “other women”)</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>Tell me why you agree (or disagree)?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>

<p>26. Other women/men you know can refuse sex with their current partner if they don't want to have it.</p> <p>(If male respondents ask about "other men" and If female respondents ask about "other women")</p>	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p><i>Tell me why you agree (or disagree)?</i></p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>
---	--	--	--

<p>Normative expectations (what the respondent believes others think she or he should do)</p> <p>[Instructions]: For the following questions think of the people who greatly influence your life. It could be your family, friends, and community members, etc.</p> <p>[NOTE] Make a note of referent group who these people are: _____</p> <p>[ASK] What does the word "influence" mean to you?</p>			
<p>27. Other people think you should be able to decide when to use contraception.</p>	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p><i>Tell me why you agree (or disagree)?</i></p> <p><i>[Probe on whether she/he follows the suggestions from the (referent group)]</i></p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>

<p>28. Other people think you should be able to use contraception even when your partner doesn't want you to.</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>Tell me why you agree (or disagree)?</i></p> <p><i>Probe on whether she/he follows the suggestions from the [referent group]</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>29. Other people think you should be able to refuse sex if you don't want to have it.</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>Tell me why you agree (or disagree)?</i></p> <p><i>Probe on whether she/he follows suggestions from the [referent group]</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>

[If you completed Section 4A, SKIP this section]

Section 4B: Critical Consciousness (the ability to perceive social, political, and economic oppression and to take action against the oppressive elements of society.)

Critical Reflection – Perceived Inequality (critical analysis of gendered constraints on opportunity).

[Instructions]: For the next several statements, think about what happens most in this community. We want to know your opinion on what happens. Remember there are no right or wrong answers. Please tell me if you “agree, “strongly agree”, disagree”, or “strongly disagree” with the following statements

Question/Statement	Answers	Probes	Overall feedback – to be filled in by interviewer
30. Women have less say than men over whether to use contraception.	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p><i>Tell me why you agree (or disagree)?</i></p> <p>[Make sure you know if she/he knows what “less say” means?]</p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/> <hr/>
31. Women have fewer <u>opportunities</u> than men.	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p><i>Tell me why you agree (or disagree)?</i></p> <p>What “opportunities” did you think about?</p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: <hr/>

32. Husbands have more control over money than their wives, even when their wives earn it.	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<i>Tell me why you agree (or disagree)?</i>	Respondent had difficulty answering the question: <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: _____ _____

33. Wives are viewed as their husband's property if the husband's family has paid bride-price.	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<i>Tell me why you agree (or disagree)?</i>	Respondent had difficulty answering the question: <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: _____ _____
34. Women who initiate sex with their partner are seen as being promiscuous [other terms used are 'loose', 'easy']	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<i>Tell me why you agree (or disagree)?</i>	Respondent had difficulty answering the question: <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult: _____ _____

			<hr/> <hr/>
Critical Reflection –Egalitarianism (endorsement of groups being treated as equals)			
<p>[Instructions]: The next few statements are about how you think things <u>should be</u>, regardless of how they are. Please tell me if you agree or disagree with the following statements.</p>			
<p>35. Women should have the final say over using contraception.</p>	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p>Tell me why you agree (or disagree)?</p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:
<p>36. Men and women should have the same educational opportunities.</p>	<input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree	<p>Tell me why you agree (or disagree)?</p> <p>What were you thinking when I said 'educational opportunities'?</p>	<p>Respondent had difficulty answering the question:</p> <input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:

<p>37. Wives shouldn't be considered their husband's property.</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>Tell me why you agree (or disagree)?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>

<p>38. Husband and wife should share control over household finances.</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>Tell me why you agree (or disagree)?</i></p> <p><i>What does 'household finances' mean to you?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>39. Women should be able to initiate sex with their partners.</p>	<p><input type="checkbox"/> 1. Agree <input type="checkbox"/> 2. Strongly agree <input type="checkbox"/> 3. Disagree <input type="checkbox"/> 4. Strongly disagree</p>	<p><i>How did you come up with your answer?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p>

			<hr/> <hr/>
--	--	--	-------------

Critical Action (Social or political participation in activities to change inequalities.)

[Instructions]: The last statements are about how often you have done certain activities in the last 12 months.

<p>How often in the last 12 months...?</p> <p>40. have you discussed the need for men and women to be treated equally?</p>	<p><input type="checkbox"/> 1. Not at all <input type="checkbox"/> 2. Rarely <input type="checkbox"/> 3. Sometimes <input type="checkbox"/> 4. Often</p>	<p><i>If other than “not at all”, Who did you discuss it with?</i></p> <p><i>What does ‘being treated equally’ mean to you?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>41. have you talked to your friends or family (<u>not</u> including partner) about contraception?</p>	<p><input type="checkbox"/> 1. Not at all <input type="checkbox"/> 2. Rarely <input type="checkbox"/> 3. Sometimes <input type="checkbox"/> 4. Often</p>	<p><i>If other than “not at all”, Who did you talk with?</i></p> <p><i>Tell me a bit about what was said.</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>

<p>42. have you talked to your friends or family about promoting women's rights?</p>	<p><input type="checkbox"/> 1. Not at all <input type="checkbox"/> 2. Rarely <input type="checkbox"/> 3. Sometimes <input type="checkbox"/> 4. Often</p>	<p><i>What does "promoting women's rights mean to you?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>43. participated in events that promote women's rights.</p>	<p><input type="checkbox"/> 1. Not at all <input type="checkbox"/> 2. Rarely <input type="checkbox"/> 3. Sometimes <input type="checkbox"/> 4. Often</p>	<p><i>What does 'participate' mean to you?</i></p> <p><i>What does 'events' mean to you?</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>
<p>44. talked to local officials about how to improve the rights of women in this community.</p>	<p><input type="checkbox"/> 1. Not at all <input type="checkbox"/> 2. Rarely <input type="checkbox"/> 3. Sometimes <input type="checkbox"/> 4. Often</p>	<p><i>Who do you think of as 'local officials'?</i></p> <p><i>Tell me more about this conversation</i></p>	<p>Respondent had difficulty answering the question:</p> <p><input type="checkbox"/> 0. No <input type="checkbox"/> 1. Yes. If selected, describe what was difficult:</p> <hr/> <hr/>

We have reached the end of this interview. Do you have any comments or questions?

- *Was anything unclear? Y/N*
- *If yes, please explain _____*
- *Were there any questions that made you feel uncomfortable? Y/N*
- *Were there questions that didn't not seem relevant to you? Y/N*

[Enter interview end time]: ____: ____ [➔ Turn OFF digital recorder]

Thank you for responses and your time. Your feedback is greatly appreciated.

[Don't forget to complete the Interviewer Debriefing form on the next page.]

Interviewer Debriefing

[Instructions: To be completed by the interviewer immediately at the end of an interview]

1. During the interview, was the atmosphere at the interview site:

- 1. Very quiet and calm; ideal for interview
- 2. Some noise and interruptions, but interview went reasonably well
- 3. Extremely chaotic and noisy; disruptive to interview

2. Where did the interview take place? [Use blank space to the type of place where interview was conducted]

- 1. Inside _____ (home, restaurant, café, salon)
- 2. Outside _____ (home, park, on street, etc...)
- 3. Other _____

3. Where any other people in the same room or near enough to overhear the interview?

- 1. Yes, Who were the people? _____
- 0. No

4. How would you describe the respondent's vocabulary (think of the words the respondent used to describe his/her thoughts)?

- 1. Below average
- 2. Average
- 3. Above average

5. In general, how attentive was the respondent during the interview?

- 1. Not at all attentive
- 2. Somewhat attentive
- 3. Very attentive

6. How much difficulty do you think the respondent had in understanding most of the questions?

- 1. No difficulty
- 2. Some difficulty
- 3. A lot of difficulty

7. Any other observations?

MEASURE Evaluation
University of North Carolina at Chapel Hill
123 West Franklin Street, Suite 330
Chapel Hill, North Carolina 27516
Phone: +1-919-445-9359
measure@unc.edu
www.measureevaluation.org

This publication was produced with the support of the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement AID-OAA-L-14-00004. MEASURE Evaluation is implemented by the Carolina Population Center, University of North Carolina at Chapel Hill in partnership with ICF International; John Snow, Inc.; Management Sciences for Health; Palladium; and Tulane University. Views expressed are not necessarily those of USAID or the United States government. TR-19-340

ISBN: 978-1-64232-138-8

