Men's Attitudes towards Contraception in Sub-Saharan Africa

Introduction

This paper creates and explores, demographically, a measure of contraception that can be calculated for all men, at any point in their lives, regardless of marital status, sexual activity, or fertility desires: men's attitudes towards contraception.

When studying men's sexual lives in sub-Saharan Africa (and elsewhere), benefit exists in examining attitudes as well as behaviors. In contrast to studying contraceptive use, general attitudes towards contraceptive use are not partner specific, accurate reporting of contraceptive use is not required, and positive attitudes can exist even among individuals desiring children in the near future. This last point is especially important in sub-Saharan Africa where fertility in many countries remains high. By examining attitudes towards use, we have a preview of potential actual use as the desired family size decreases.

Literature Review

Studies are often hindered by men's inclusion only as partners of women and the limited definitions of partnerships considered, for example restricting couples to those who are in long-term unions, monogamous, or legally recognized (Bankole and Singh 1998, Greene and Biddlecom 2000). Men are more likely than women to report non-marital sexual relations, and unmarried men are more likely than unmarried women to report causal partners (Curtis and Sutherland 2004). Therefore including men outside of long term

relationships is essential when constructing a non-biased picture of men's sexual activities and attitudes.

In marriage, many men interviewed by the Demographic and Health Surveys (DHS) report more than one wife (ranging from 1.7% in Madagascar 2008 and Lesotho 2009 to 30.5% in Guinea 2012[1]), while a woman having two husbands is rare enough to warrant international news coverage (BBC News 2013)[2]. Bingheimer (2010) finds that multiple partnerships are more common among men living with women than those married to their partners in sub-Saharan Africa. This finding is consistent with previous work (Bietsch 2015) which finds that men who are living with women have much higher odds of needing protection against sexually transmitted infections than those who are married.

Bingheimer also finds higher rates of multiple partnerships among never-married men than married (non-polygamous) men and that formerly married men have high rates of multiple partners in countries he studies in sub-Saharan Africa.

Men's multiple partnerships complicate sexual health research because of the difficulty in determining their need for and use of contraception. While a woman using a non-coitus dependent method is protected against pregnancy with all partners, a man, for example, may rely on one partner to use a female method, while using condoms with a second, and no method with a third. McGinn, Bamba, and Balma (1989) find this situation to be common with abstinence following childbirth; men in their Burkinabe focus group report

[1] Calculated using the most recent DHS survey for all countries in sub-Saharan Africa as provided on statcompiler.com

[2] Two men in Kenya were persuaded into marrying the same woman after she refused to choose between them.

that while wives may practice abstinence, men "take care of themselves elsewhere" (McGinn *et al*. 1989).

Attitudes are also an ideal way to study men's sexual and reproductive health as information on contraceptive use is not required. By not studying use, we remove the potential bias of covert female use of contraception as well as the bias in men's own reporting- Ezeh and Mboup (1997) find gaps in contraception use reported by men and women in the five Demographic and Health Surveys they review.

In areas with high fertility and low contraceptive use, attitudes can indicate the reception of family planning by the community. Attitudes offer information about reproductive health of individuals wanting children in the near future (those who in an unmet need analysis are labeled as having no demand for family planning). Mahmood and Ringheim (1996) find that while most men in Pakistan want more children, the majority also approve of family planning. Here, attitudes are an indicator that family planning methods could be accepted by many and lead to lower fertility if the desired family size decreased.

Approval of family planning as a precursor to use is especially important in sub-Saharan Africa where many countries still have high fertility or have seen their fertility levels fall and then stall (Bongaarts 2006). As previous research discusses (Bietsch 2015), unmet need may be low due either to high levels of contraceptive use or to low demand for contraception because of the desire among many people to have another child soon. Analysis of attitudes can offer insight in this latter scenario, where most people have little need for contraception because of high fertility desires. Their attitudes, however, offer a potential view of what might happen if their fertility desires did decline. Of course, for

contraceptives to be used to delay or avoid births, they must be available and affordable, but approval of their use in general is a first step in the actual use of contraception.

Several studies look at men's attitudes towards family planning in sub-Saharan Africa and worldwide. In interviews with urban Sudanese men, Khalifa (1988) finds that most men (91%) approve of family planning if their wife's health were in danger, while only 57% approve of use of family planning because of limited economic resources. In Pakistan, Mahmood and Ringheim (1996) report that more husbands than wives approve of contraceptive use.

Most research on male attitudes relies on wives' reports of their husbands' beliefs. Joesoef, Baughman, and Utomo's (1988) paper on the determinants of contraceptive use in several Indonesian cities finds that husbands' approval is the most important determinant, though the authors caution that wives may misperceive their husbands' approval, or project their own approval onto their perception of their husbands'. In Niger and The Gambia, Cotton et al. (1992) find husband's disapproval to be a primary reason given by women who discontinue use of contraception. Husbands' approval is shown to be an important, though not the most important, determinant of contraceptive use in other research. In qualitative interviews in the Philippines, Casterline, Perez, and Biddlecom (1997) find that while husbands' attitudes are not often cited as a primary reason for not using a contraceptive method, husbands' preferences are repeatedly mentioned by women in interviews when discussing reproductive matters.

Earlier studies from sub-Saharan Africa (Khalifa 1988 and Adamchak and Adebayo 1987) find that many men believe that women should not use contraception without their

husband's consent. The Sudanese men in Khalifa's study also believe that husbands should provide contraception if it is to be used. This finding differs from those from other research in other countries on the continent. Mbizvo and Adamchak's (1991) analysis of Zimbabwean men finds that while respondents believe that men should make decisions concerning the number of children to have and the use of contraception, women should obtain the family planning methods. This finding is similar to results from Maharaj's 2001 study in South Africa, where men report that the responsibility of obtaining contraception belongs to their wives.

Hulton and Falkingham (1996) propose that men may misunderstand methods and services, have little or no communication with their spouses about family planning, and believe that if their wives used contraception they would become promiscuous. Men's fears surrounding their wives' faithfulness is also found in many qualitative interviews conducted by Silberschmidt (1992) in the Kisii district of Kenya, who reports that husbands fear their wives will engage in sexual relationships with other men if they are allowed to use contraception. At the same time, many women report using family planning covertly to avoid their husbands' disapproval (Silberschmidt 1992).

Men in South Africa are found to have varying attitudes for different contraceptive methods (Maharaj 2001). Most men approve of family planning to regulate fertility, but are resistant to condom use as they associate condoms with promiscuity.

Two other recent studies examine men's attitudes in sub-Saharan Africa, not towards contraception, but gender. In a 2009 analysis of Demographic and Health Survey male surveys, Johnson and Gu find that men who are supportive of women's rights are less

likely (though only slightly) to report having had a sexually transmitted infection in the last year. Snow, Winter, and Harlow (2013) observe an association between men's tolerance of wife beating and higher fertility aspirations in five East African countries. These studies suggest that men's broader attitudes towards gender are also related to their sexual and reproductive health.

This paper will examine the association between several demographic characteristics and approval of family planning. In addition, methods in which men learn or communicate about contraception will be explored, as well as the interaction effects between these modes of communication and men's demographic characteristics. Means include passive forms of communication (radio and television) and active communication (friends and partners).

Oni and McCarthy's (1991) study in Ilorin, Nigeria finds 60% of the men interviewed report learning general information about family planning from radio, television, or newspapers. In a review of 24 interventions targeting men's sexual health knowledge and practice, Strenberb and Hubley (2004) conclude that large-scale media campaigns may be one option to reach and engage men. According to recent Demographic and Health Surveys, listening to the radio at least once a week is a common activity among men living in sub-Saharan Africa- ranging from 38% in Ethiopia (2011) to 90% in Kenya (2008-2009)[3]. Watching television is increasing in popularity, and recent surveys find that viewership ranges from 14% in Chad (2004) to 91% in Gabon (2012)[3]. Hearing about family planning from the media is reported by a majority of men in 20 out of 36

sub-Saharan African countries with Demographic and Health Surveys[3]. Among the men included in the following analysis, 66% and 32% report hearing about family planning on the radio and television respectively (see Table 1).

While media can reach a large number of men with a general message, men also learn and talk about contraception with the people around them. A survey of American teenage males (Finkel and Finkel 1975) finds that male peers are the most commonly cited source of information about sex and reproduction. In sub-Saharan Africa, McGinn *et al*. (1989) suggest friends and family members can sensitize and familiarize those around them about family planning. 22% of men in our analysis report friends or neighbors as someone with whom they have discussed contraception, though we are unable to know who began the conversation or its content.

Most studies that look at discussion of family planning focus on couples, and many find positive associations between spousal communications and contraceptive use. In Oni and McCarthy's study of men in Ilorin, Nigeria, spousal communication about family planning is associated with current contraceptive use, men's correct reporting of their partner's use, and use of both male and female methods. In Becker and Costenbader's (2001) 23 country analysis of couples' reports of contractive use, discussion of family planning between spouses is a predictor of concurrence in reporting the same method of contraception. Kimuna and Adamchak (2001) analyze couple communication in the 1993 Kenya DHS and find a significant increase in the likelihood of ever using contraception (net of other controls) when men report discussing family planning with

[3] Calculated using the most recent DHS survey for all countries in sub-Saharan Africa as provided on statcompiler.com

their partners. In an earlier survey (Kenya DHS 1989), Lasee and Becker (1997) show that one partner's prediction of the other's approval of family planning is more likely to be correct if the couple discussed family planning than if they did not. Additionally, Salway's (1994) analysis of couples in Ghana finds a positive association between discussion of family planning and contraceptive use, even after controlling for confounding variables.

Partners who do not discuss contraception may make assumptions about their partners' attitudes. For example, Bongaarts and Bruce (1995) show that 68% of women (from six DHS surveys in sub-Saharan Africa) who report their husbands' disapproval of family planning have never discussed the subject with them. However, discussion of family planning does not necessarily lead to the correct knowledge of partner's attitudes. In an analysis of the 1989 Kenyan DHS, Lassee and Becker (1997) find that while 82% of couples report discussions of family planning, only 75% of husbands correctly identify their wives' attitude towards contraception, and even fewer women correctly report their husbands (67%).

One problem with the structure of the DHS questionnaire and other surveys surrounding spousal discussion is that only the occurrence of discussion is questioned, not who initiated or the outcome of the conversation. Because of this structure, several problems occur when studying spousal communication. The first is the issue of reverse causality- does discussion of contraception use occur because couples are already using contraception, perhaps when a problem arises with their method of use? Another issue is that couples may discuss contraceptive use, and one partner can voice disapproval, which may lead the couple not to use contraception. An additional issue that is identified in the

literature is that partners may incorrectly assume their partner's approval because of their willingness to discuss contraception. This misperception is found by DeRoseet al. in a 2004 analysis of 21 sub-Saharan African countries in which women who discuss family planning with their husbands are less likely to correctly report their husband's disapproval than those who do not. The authors suspect that a husband's willingness to discuss family planning may signal his approval of contraceptive use to his wife, leading to an unrecognized conflict between the spouses. Only 11% of men in our data reported discussing family planning recently with a partner.

The goal in this paper is to examine these modes of communication and approval of family planning and also to introduce interactions between modes of communication and a variety of demographic characteristics to see the relative importance of communication for different groups.

Data and Methods

Data for this paper are from the Demographic and Health Surveys conducted in sub-Saharan Africa. DHS has conducted surveys of men, independent of marital status, in the region since 1991. Inclusions of questions regarding attitudes towards and communication about family planning vary across surveys. In earlier surveys, the only contraception attitude question included was "would you say that you approve or disapprove of couples using a method to avoid getting pregnant?" In later surveys, additional statements were given and men were asked to agree or disagree with each. These statements addressed more gendered attitudes towards contraception, such as "contraception is women's business and a man should not have to worry about it.",

"Women who use contraception may become promiscuous.", and "A woman is the one who gets pregnant so she should be the one to use contraception." The last of these statements was given in only a handful of surveys and is therefore not included in the following analysis.

Trends in country level averages for the three questions are shown in Figures 1-3. For the country-level data presented in Figure 1, a regression with country fixed effects finds a statistically significant increase in approval, around 6 percentage points per decade. As can be seen, this question was commonly asked from the early 1990s till the mid-2000s. Figure 2 shows the percent of men in each survey who disagree with the statement that contraception is women's business. This question was asked in fewer surveys, and the trend, while not statistically significant, is nearly the same as for the first question, with an average 6 percentage point increase per decade. Figure 3 shows the last attitude question included in this paper, the percent of men who disagree with the idea that contraception makes women promiscuous. The trend in country approval (found with a regression that contains country level fixed effects) is significant and larger than the previous two, with an estimated 15 percentage point increase per decade. The latter two questions were asked more commonly in the new millennium. In the early to mid-2000s, the general approval question along with gender statements were included in many male surveys and are the focus of the remainder of this paper. Approval levels among these men are presented in the summary statistics in Table 1.

The regression analyses in this paper combine seven surveys that include all questions of interest: Burkina Faso (2003), Ghana (2003), Malawi (2004), Mozambique (2003), Niger (2006), Nigeria (2003), and Tanzania (2004-2005). Together, these surveys interview

23,311 men. Excluding those over age 50[4] (thus restricting the analysis to men 15-49) and those with missing information on variables of interest (115 observations) results in a final sample size of 21,019 men. Descriptive statistics about these men are presented in Table 1.

A measure of attitude towards contraception is created by combining responses from three attitude questions:

1. Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?
2. (Do you agree or disagree-) Contraception is women's business and a man should not have to worry about it.
3. (Do you agree or disagree-) Women who use contraception may become promiscuous.

To construct the measure, respondents are given one point for each positive attitude towards family planning. Positive attitudes are considered approval of the first question and disapproval of the second and third. During the interview, subjects are also given the option to answer "no opinion" to any of the three questions. Following Joesoef *et al.*'s (1988) example, lack of opinion is considered a negative opinion towards family planning. Combining these responses together, each man is assigned a family planning attitude score ranging from 0-3[5]. With the additive attitude score as the outcome variable of interest, ordered logit models are used for the analyses.

[4] Not all surveys interviewed men over the age of 50. Thus, they are excluded here to maintain uniformity across surveys.

[5] A Guttman method of combining attitudes together was also considered, ordering the questions from general approval to contraception as women's business to promiscuity. Approximately 75% of responses fell into the correct order, lower than the general

The following regressions include indicators for age, marital status, education, and religion. Categorical variables for age are separated into 5 year groups, with 30-34 serving as the reference group. Marital status is divided into never-married, married (reference group), living together as if married, and divorced or widowed. Educational categories are cut at no education, some or completed primary education (reference group), some or completed secondary education, and higher. Religious affiliations include Muslim (reference group), Christian[6], and other[7].

Forms of communication are included in the analysis as dummy variables. In the questionnaires, interviewees are asked if they have heard about family planning on the radio in the last few months. The same format is used for television. Interview subjects in these seven surveys are asked an open ended question about who they have discussed family planning with in the last few months, allowing them to list as many people as they have talked to. These responses are used to create dummy variables for friends (including neighbors) and partners. Men do not indicate the type of relationship they have with the partner with whom they discuss family planning. There is a potential bias in that only men with some sort of partner can discuss family planning with a partner. It is difficult to measure partnership here, though 4,608 of the 21,019 men in the analysis, have reportedly never engaged in sexual intercourse[8]. This finding does not mean,

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Guttman threshold. An alternative analysis conducted using a Guttman score showed no substantively different results from the additive analysis.

[6] The following analyses were also conducted seperating Catholics from other Christian denominations. As in Westoff and Bietsch (2015), differences between the groups were minimal, and thus combined.

[7] Categorization of religion varies across surveys. Those classified as "others" are generally animist or state no religion.

[8] The countries vary in the proportion of their sample that has never had sex. The proportion ranges from less than 10% in Mozambique to over 30% in Niger.

however, that they have never had a partner with whom they could discuss family planning.

Interaction effects between the modes of communication and demographic variables are created to examine the relative importance of each mode in different sub-groups. Modes of communication are examined in their own interaction model (though all 4 modes are included).

Results

Regression results from the ordered logit analyses are presented in Table 2. The ordered logit results can be interpreted as shifts in a latent distribution of family planning approval, so along with coefficients and standard errors, Table 2 presents the shift in standard deviations (SD) of the latent distribution for each variable. This measurement is calculated by dividing coefficients by $\pi/\sqrt{3}$. Column I displays results from the regression including only demographic and social variables. The distribution of approval scores by age (controlling for the other variables) are lowest in the youngest age group (0.52 standard deviations lower than the reference group, age 30-34), increase to age range 30-44, and then are again statistically lower for the oldest age group (-0.07 SD). By marital status, there are no statistically significant differences between married men (the reference group) and never-married men and those living with women but not married. Men who are divorced or widowed have a statistically lower distribution of scores on the approval of family planning scale than married men, with a decrease of 0.12 SD on the underlying latent scale. While men with no education have a coefficient less than zero (and therefore an expected approval score lower than those with primary

education, all else equal), men with secondary and higher education have positive coefficients. Finally, for the three religious categories, Christians have statistically higher approval scores than Muslims (controlling for other characteristics), while the non-Christian, non-Muslims have lower scores than Muslims.

Column II introduces the four modes of communication about family planning into the model. All are positive and highly statistically significant, indicating a positive association between communication about family planning and approval. The largest shift in the underlying scale of the four dummy variables belongs to conversation with partner (0.37 SD), followed by radio (0.33 SD), friends (0.16 SD), and television (0.12 SD). The demographic variables included in both models show fairly similar results, the one exception being marital status, where in the later model, those who are never-married have a positive and significant coefficient (in reference to married men), and there is no longer a statistical difference between married and formerly married men.

Columns III-VI explore interactions between the modes of communication and demographic variables. In all cases, the main effect of all four discussion and communication variables are positive and highly statistically significant.

Looking at the interactions between marital status and radio, never-married and formerly married men show positive interactions (both in reference to married men), though the main effects are both negative. For formerly married men, combining the interaction and main effect closes the gap (there is no longer a statistical difference in the underlying distribution) with married men who also hear about family planning on the radio, while for never-married men the interaction closes and exceeds the main effect difference: the

main effects shift the latent distribution by 0.46 SD for married men and 0.46-0.19 SD for never-married men. But the interaction shifts the distribution for never-married men who hear about family planning on the radio by an additional 0.39 SD, resulting in an underlying distribution for approval by never-married men who hear about family planning on the radio (for a combined shift of the latent distribution by 0.66 SD) to be statistically higher than the distribution of approval for married men who hear about family planning on the radio (0.46 SD). The interactions for the various martial groups and hearing about family planning on television are not statistically significant. When the focus shifts to active forms of communication with friends and neighbors, looking at the coefficients for the main effects, only formerly married men have a statistically different association with approval than married men (a shift downwards of 0.18 SD), and this relationship is negative. But in terms of interactions, both formerly married and never-married men have positive and significant interactions (0.35 SD and 0.33 SD, respectively), suggesting that the importance of communication with peers may be more important for those who are unmarried than for those who are married. Finally, for discussion with partners, while the main effect for men living, but not married to, a woman is negative (-0.06 SD), the interaction with discussion is positive (0.37 SD), highly statistically significant, and the combined main and interaction effect is a statistically higher distribution than the distribution of responses for men who are married to their partners, controlling for all other variables.

When examining the interactions between the different modes of communication and education, we see in most cases a reversal of the main effect. For those who hear about family planning on the radio, the size of the coefficients for the interaction effects are

lower with higher levels of education. For those with no education, the interaction effect is positive and statistically significant (0.09 SD); this finding is in comparison to those with primary education who hear about family planning on the radio. On the other side, the interactions for secondary and higher education and radio are negative and statistically significant. The interaction latent shifts (-0.20 and -0.43 SD, respectively) are smaller than the main effects (0.42 and 0.92 SD, respectively), and statistically, the distribution of approval scores for those with primary education who report hearing about family planning on the radio is lower than that among those with secondary and higher education who report similar experiences. This finding suggests that while hearing about family planning on the radio is associated with higher approval of family planning, it does not close the gap in education status and approval. For television, only the interaction term for those with no education is statistically significant. This positive association is nearly as large as the main effect for the comparison of those with no education to those with a primary education (0.16 SD for the interaction compared to -0.13SD for the main effect), and for men who hear about family planning on the television, there is no statistical difference in the distribution of approval for those with no and primary education. In the interaction regression with peers, there appears no difference in interactions based on educational attainment. For discussion of family planning with partners, the only statistically significant interaction exists for men with no education, an interaction so large that for men who discuss family planning with their partners, the distribution for men with no education is statistically higher than for those with primary education. Examining modes of communication and education, the largest

interaction effects (with primary education as the reference group) are for those men with no education.

Turning to religion, the main relationships between religious groups and family planning approval remain constant through the four regressions with interactions, with Christians having statistically higher coefficients compared to Muslims, and others having statistically lower. Looking at the interaction effects between religious groups and radio, the interaction for others is positive and statistically significant, though not large enough to close the gap between others and Muslims and approval when both hear about family planning on the radio. For television, the interaction for Christians is negative and significant, and equivalent to the main effect of Christians compared to Muslims, so that when both religions hear about family planning on the television, there is no statistical difference in the distribution of their approval scores. For friends and neighbors, the interaction for Christian is also negative and statistically significant. The interaction between religious groups and discussion of family planning with a partner shows no statistically significant differences, though the pattern of main effects remains the same.

Discussion

Results presented in the previous section point to varying levels of approval of family planning among demographic sub-groups in sub-Saharan Africa.

Looking first at the age pattern that appears throughout the regression analyses, the results suggest that adolescents, the youngest men in the analysis, have the lowest level of approval, controlling for other demographic variables. This finding may occur because adolescents are the least likely to be sexually active, married, to have children, or to ever

have used contraception, and have therefore have not thought about contraception, its use, or their attitudes towards it[9].

While the relationship between the never-married group (highly correlated with the youngest age group) and married men are not statistically different when looking at the main effects, in all four interaction regressions the coefficients for the never-married interaction with mode of communication are positive (though only significant for radio and friends/neighbors). It may be that never-married men are more amenable to outside influence on their attitudes about family planning. Alternatively, there may be a shift in the generations in terms of acceptability of discussing family planning and the influence of others on your opinions[10].

The relationship between formerly married men and married men in these analyses is similar to that with never-married men. Both interactions with radio and friends/neighbors are positive and significant, again suggesting that men not living with women may be more amenable to outside influences.

For men who live with women but are not married to them, the main difference with married men is the positive interaction for discussion of family planning with partners. The reason for this finding is debatable. It could be that married men are less open to their partners shifting their opinions than men living with women. Additionally, the type

[9] A multinomial logit model for the three original outcomes (approve, disapprove, and do not know) with categorical ages (and survey controls) as the independent variables finds that men under 20 are more likely to answer "don't know" compared to "disagree" then men in the reference group (30-34). Additionally, they are less likely to answer "agree" compared to "disagree."

[10] To answer this question, we would need information on family planning attitudes asked in DHS surveys across time. Unfortunately, general attitudes towards family planning have not been asked for many years.

of conversation could be fundamentally different. As marriage is, in general, a child-bearing institution in sub-Saharan Africa, conversations in marriage could consists of men voicing their disapproval of contraception because of pronatalist tendencies. Men who are living with women but not married to them may be more willing to discuss and approve of family planning as the relationship is less permanent. Whatever the case, this result brings to mind a finding from Bietsch (2015)'s study of sexually transmitted infections- that men who are living with women are much more likely to have additional partners than married men (excluding polygamous men's multiple wives). Both of the analyses illustrate that differences exist between married men and men living with women in terms of their sexual actions and attitudes.

Turning to education, there appears a consistent pattern of higher levels of education associated with higher levels of approval. This pattern mirrors results found in Bietsch 2015, where higher levels of education were associated with higher odds ratios of desires to space/limit versus have a child soon, limit versus space (of those not desiring a child in the next two years), and use of contraception among those with demand for contraception. When looking at the interactions between modes of communication and approval, the educational gradient declines- interactions between modes of communication and lower educational statuses have larger coefficients than higher levels of education. This finding is especially true when comparing those with no education to those with primary education.

With religion there is a pattern of acceptance, from highest among the Christians, to the Muslims in the middle, and the "others" at the lower end. This ordered pattern was also observed in Bietsch 2015 in terms of desire to space/limit childbirths and use of

contraception. Looking at the interaction models for the different modes of communication, there is no discernible pattern, though for television and friends/neighbors, Christians receive less of an impact than Muslims.

Conclusion

This paper has constructed a new measure of contraception for men in sub-Saharan Africa. Because of the low reported use of contraception and complicated sexual partnerships, examining men's attitudes offers a universal means of analyzing men's sexual and contraceptive behaviors. This paper has shown variation in attitudes by demographic characteristics and the outside influences that may shape these attitudes.. As the trends have shown, positive attitudes towards family planning are increasing throughout sub-Saharan Africa, and with decreasing desired number of children and increasing access to contraceptive services, positive attitudes may translate into increased contraceptive use and declines in fertility in a region with some of the highest fertility in the world.

References

Adamchak, Donald J., and Donald J. Adebayo. 1987. "Male Fertility Attitudes: A Neglected Dimension in Nigerian Fertility Research " Pp. 1-2, 57-67 in *Biodemography and Social Biology*.

Bankole, Akinrinola, and Susheela Singh. 1998. "Couples' Fertility and Contraceptive Decision-Making in Developing Countries: Hearing the Man's Voice." *International Family Planning Perspectives* 24(1):15-24.

BBC News. August 26, 2013. "Kenyan Trio in 'Wife-Sharing' Deal." in *BBC News Africa*. Online: http://www.bbc.com/news/world-africa-23840824. BBC.

Becker, Stan, and Elizabeth Costenbader. 2001. "Husbands' and Wives' Reports of Contraceptive Use." *Studies in Family Planning* 32(2):111-29.

Bingenheimer, Jeffrey B. 2010. "Men's Multiple Sexual Partnerships in 15 Sub-Saharan African Countries: Sociodemographic Patterns and Implications." *Studies in Family Planning* 41(1):1-17.

Bongaarts, John. 2006. "The Causes of Stalling Fertility Transitions." *Studies in Family Planning* 37(1):1-16.

Bongaarts, John, and Judith Bruce. 1995. "The Causes of Unmet Need for Contraception and the Social Content of Services." *Studies in Family Planning* 26(2):57-75.

Casterline, John B., Aurora E. Perez, and Ann E. Biddlecom. 1997. "Factors Underlying Unmet Need for Family Planning in the Philippines." *Studies in Family Planning* 28(3):173-91.

Coale, Ansley. 1973. "The Demographic Transition." Pp. 53-72 in *International Population Conference*. Liege, Belgium: IUSSP.

Cotten, Niki, John Stanback, Halima Maidouka, Joseph T. Taylor-Thomas, and Tom Turk. 1992. "Early Discontinuation of Contraceptive Use in Niger and The Gambia." *International Family Planning Perspectives* 18(4):145-49.

Curtis, Sian L, and Elizabeth G Sutherland. 2004. "Measuring Sexual Behaviour in the Era of HIV/AIDS: the Experience of Demographic and Health Surveys and Similar Enquiries." *Sexually Transmitted Infections* 80(suppl 2):ii22-ii27.

DeRose, Laurie F., F. Nii-Amoo Dodoo, Alex C. Ezeh, and Tom O. Owuor. 2004. "Does Discussion of Family Planning Improve Knowledge of Partner's Attitude toward Contraceptives?" *International Family Planning Perspectives* 30(2):87-93.

Ezeh, Alex Chika, and Gora Mboup. 1997. "Estimates and Explanations of Gender Differentials in Contraceptive Prevalence Rates." *Studies in Family Planning* 28(2):104-21.

Finkel, Madelon Lubin, and David J. Finkel. 1975. "Sexual and Contraceptive Knowledge, Attitudes and Behavior of Male Adolescents." *Family Planning Perspectives* 7(6):256-60.

Greene, Margaret E., and Ann E. Biddlecom. 2000. "Absent and Problematic Men: Demographic Accounts of Male Reproductive Roles." *Population and Development Review* 26(1):81-115.

Hulton, Louise, and Jane Falkingham. 1996. "Male Contraceptive Knowledge and Practice: What Do We Know?" *Reproductive Health Matters* 4(7):90-100.

Joesoef, Mohamad R, Andrew L Baughman, and Budi Utomo. 1988. "Husband's Approval of Contraceptive Use in Metropolitan Indonesia: Program Implications." *Studies in Family Planning* 19(3):162-68.

Johnson, Kiersten, and Yuan Gu. 2009. "Men's Reproductive Health: Findings from Demographic and Health Surveys, 1995-2004." in *DHS Comparative Reports*. Calverton, Maryland, USA: ICF Macro.

Khalifa, Mona A. 1988. "Attitudes of Urban Sudanese Men toward Family Planning." *Studies in Family Planning* 19(4):236-43.

Kimuna, Sitawa R., and Donald J. Adamchak. 2001. "Gender Relations: Husband-Wife Fertility And Family Planning Decisions In Kenya." *Journal of Biosocial Science* 33(01):13-23.

Lasee, Ashraf, and Stan Becker. 1997. "Husband-Wife Communication About Family Planning and Contraceptive Use in Kenya." *International Family Planning Perspectives* 23(1):15-33.

Maharaj, Pranitha. 2001. "Male Attitudes to Family Planning in the Era of HIV/AIDS: Evidence from KwaZulu-Natal, South Africa." *Journal of Southern African Studies* 27(2):245-57.

Mahmood, Naushin, and Karin Ringheim. 1996. "Factors affecting contraceptive use in Pakistan." *The Pakistan Development Review 35(1)*:1-22.

Mbizvo, Michael T., and Donald J. Adamchak. 1991. "Family Planning Knowledge, Attitudes, and Practices of Men in Zimbabwe." *Studies in Family Planning* 22(1):31-38.

McGinn, Therese, Azara Bamba, and Moise Balma. 1989. "Male Knowledge, Use and Attitudes Regarding Family Planning in Burkina Faso." *International Family Planning Perspectives* 15(3):84-95.

Oni, Gbolahan A., and James McCarthy. 1991. "Family Planning Knowledge, Attitudes and Practices of Males in Ilorin, Nigeria." *International Family Planning Perspectives* 17(2):50-64.

Salway, Sarah. 1994. "How Attitudes Toward Family Planning and Discussion Between Wives and Husbands Affect Contraceptive Use in Ghana." *International Family Planning Perspectives* 20(2):44-74.

Silberschmidt, Margrethe. 1992. "Have Men Become the Weaker Sex? Changing Life Situations in Kisii District, Kenya." *The Journal of Modern African Studies* 30(2):237-53.

Snow, Rachel C., Rebecca A. Winter, and Siobán D. Harlow. 2013. "Gender Attitudes and Fertility Aspirations among Young Men in Five High Fertility East African Countries." *Studies in Family Planning* 44(1):1-24.

Speizer, Ilene, and Andrew J. Yates. 1998. "Polygyny and African Couple Research." *Population Research and Policy Review 17(6):*551-70.

Sternberg, Peter, and John Hubley. 2004. "Evaluating Men's Involvement as a Strategy in Sexual and Reproductive Health Promotion." *Health Promotion International* 19(3):389-96.

Westoff CF and K Bietsch. 2015. Religion and Reproductive Behavior in Sub-Saharan Africa. DHS Analytical Studies No. 48. Rockville, Maryland, USA: ICF International.

Tables and Figures

Figure 1: Trends in Approval of Family Planning by Africa Men

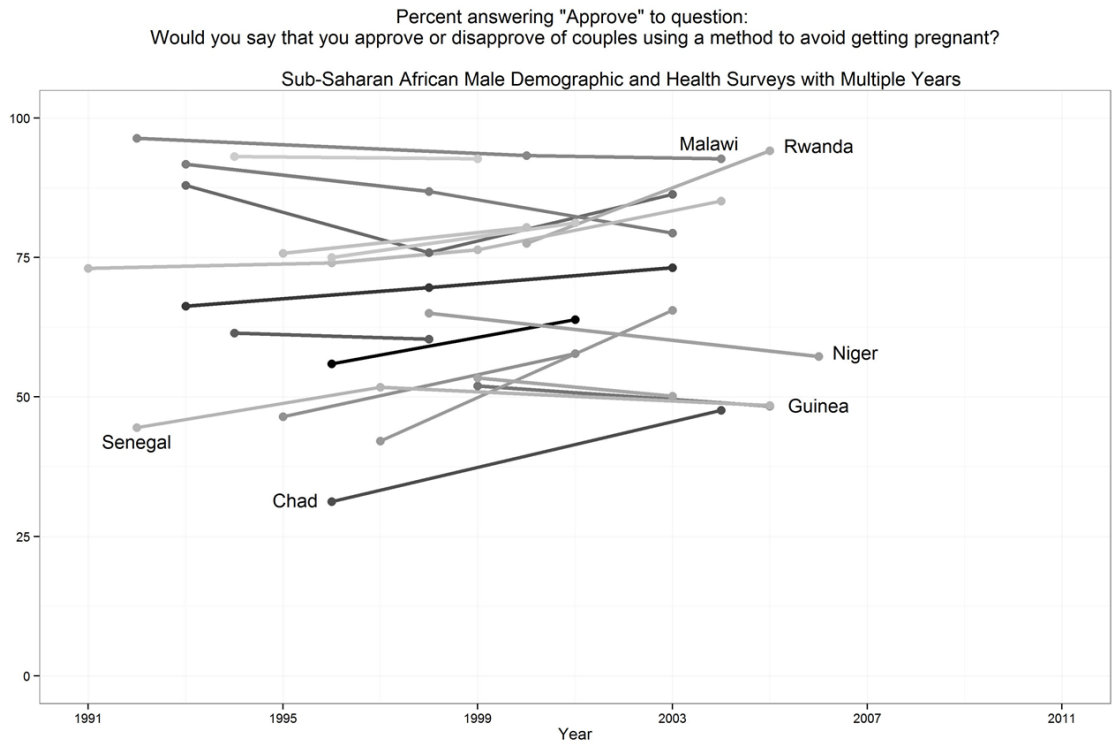

Figure 2: Trends in Disagreement with the Idea that Contraception is Women's Business

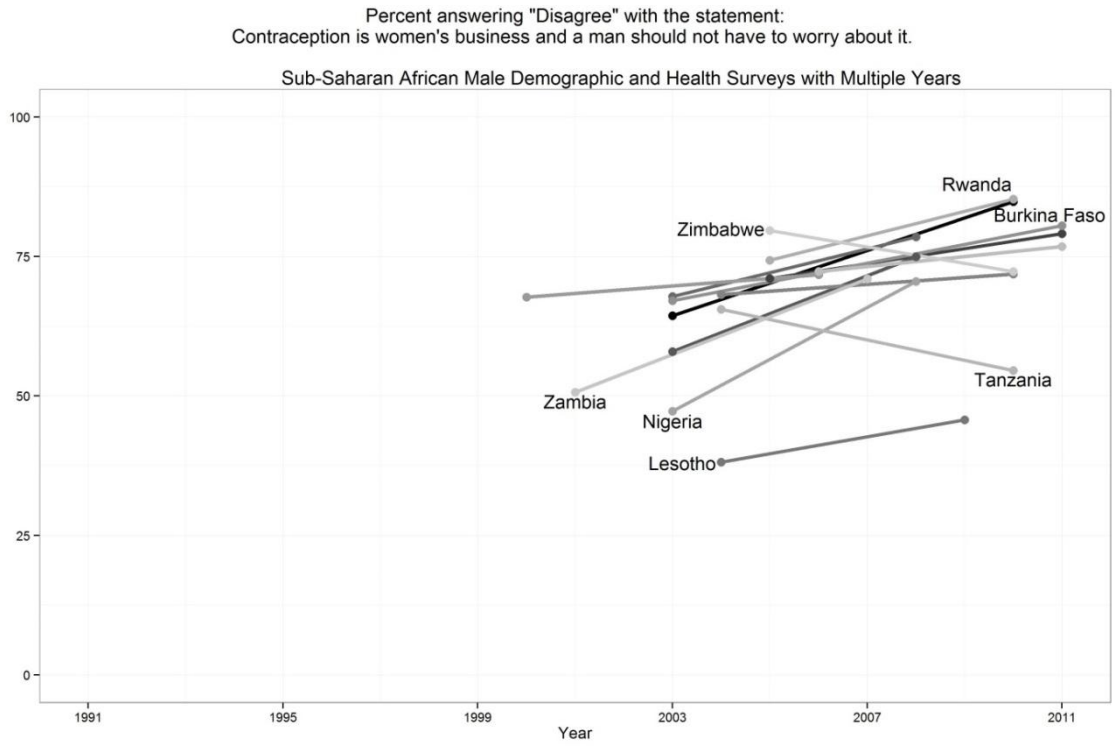

Figure 3: Trends in Disagreement with the Idea that Contraception Makes Women Promiscuous

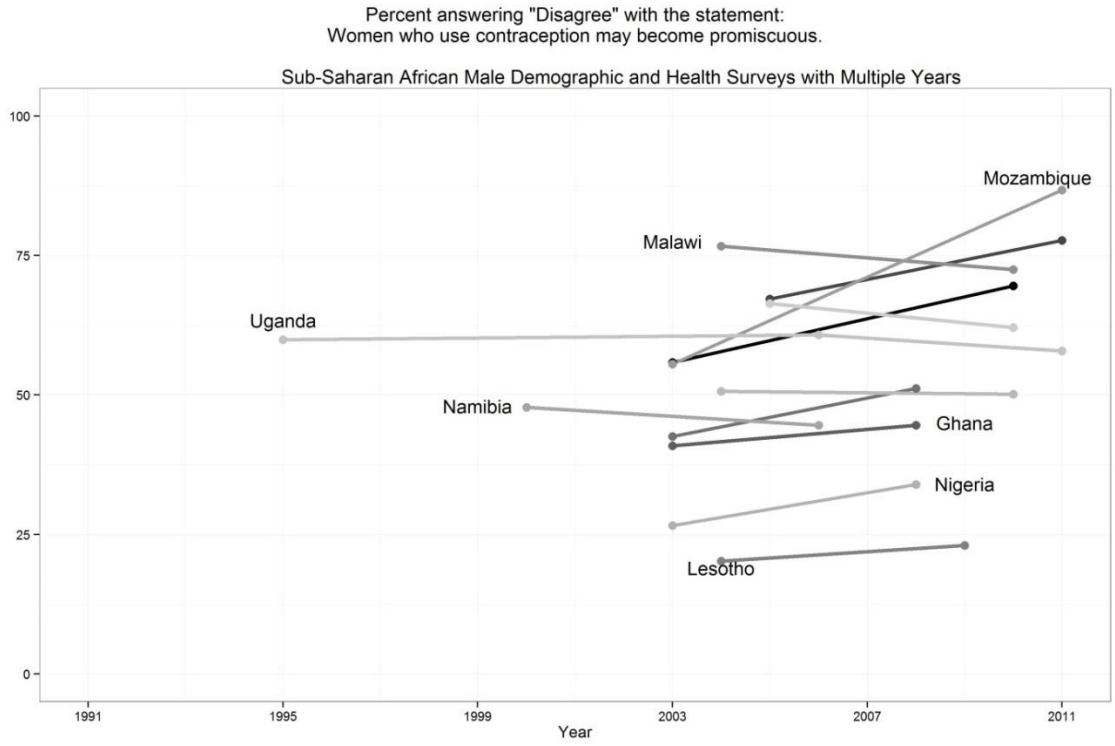

Table 1: Descriptive Statistics of Individuals Included in Analysis

Age	
15-19	24%
20-24	17%
25-29	16%
30-34	14%
35-39	11%
40-44	10%
45-49	8%
Marrital Status	
Married	49%
Never Married	42%
Living Together	6%
Divorced or Widowed	4%
Education	
None	29%
Primary	38%
Secondary	28%
Higher	4%
Religion	
Muslim	40%
Christian	49%
Other	11%
Heard about family planning on or discussed family planning with:	
Radio	66%
Television	32%
Neighbors	22%
Partner	11%
Positve Attitudes Towards Family Planning	
Approve of Family Planning	75%
Does Not Make Women Promiscusious	54%
Not Just Women's Business	64%
N	21,019

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Table 2: Ordered Logit Regressions for Approval of Family Planning (on a score of 0-3) for men in 7 Sub-Saharan African Countries

	I			II			III			IV			V			VI		
	Coefficient	SE	SD Change	Coefficient	SE	SD Change	Coefficient	SE	SD Change	Coefficient	SE	SD Change	Coefficient	SE	SD Change	Coefficient	SE	SD Change
Age 15-19	-0.94***	0.06	-0.52	-0.74***	0.06	-0.41	-0.75***	0.11	-0.41	-0.80***	0.07	-0.44	-0.71***	0.07	-0.39	-0.75***	0.06	-0.42
Age 20-24	-0.38***	0.05	-0.21	-0.29***	0.05	-0.16	-0.24**	0.10	-0.13	-0.32***	0.06	-0.17	-0.24***	0.06	-0.13	-0.31***	0.06	-0.17
Age 25-29	-0.16***	0.05	-0.09	-0.13***	0.05	-0.07	-0.11	0.09	-0.06	-0.10*	0.06	-0.06	-0.09	0.06	-0.05	-0.14***	0.05	-0.08
Age 30-34 (Reference)																		
Age 35-39	-0.05	0.05	-0.03	-0.03	0.05	-0.02	0.15	0.10	0.08	-0.08	0.06	-0.04	0.03	0.06	0.02	-0.01	0.06	-0.01
Age 40-44	-0.06	0.05	-0.03	-0.03	0.05	-0.02	0.21**	0.10	0.12	0.05	0.07	0.03	0.03	0.06	0.02	-0.07	0.06	-0.04
Age 45-49	-0.13**	0.06	-0.07	-0.10*	0.06	-0.06	-0.08	0.11	-0.04	-0.12*	0.07	-0.07	-0.04	0.06	-0.02	-0.14**	0.06	-0.08
Married (Reference)																		
Never Married	-0.03	0.04	-0.02	0.09**	0.05	0.05	-0.19**	0.08	-0.10	0.05	0.06	0.03	0.01	0.05	0.01	0.07	0.05	0.04
Living Together	-0.03	0.06	-0.02	0.00	0.06	0.00	-0.10	0.10	-0.05	0.02	0.07	0.01	0.00	0.07	0.00	-0.11*	0.07	-0.06
Divorced or Widowed	-0.22***	0.07	-0.12	-0.10	0.07	-0.06	-0.34***	0.13	-0.19	-0.10	0.09	-0.05	-0.18**	0.08	-0.10	-0.101	0.07	-0.06
No Education	-0.32***	0.04	-0.18	-0.20***	0.04	-0.11	-0.30***	0.06	-0.16	-0.25***	0.04	-0.13	-0.22***	0.04	-0.12	-0.25***	0.04	-0.14
Primary Education (Reference)																		
Secondary Education	0.66***	0.04	0.36	0.50***	0.04	0.28	0.76***	0.07	0.42	0.55***	0.05	0.30	0.51***	0.04	0.28	0.50***	0.04	0.28
Higher Education	1.25***	0.08	0.69	1.04***	0.08	0.57	1.66***	0.17	0.92	1.18***	0.14	0.65	1.11***	0.10	0.61	1.10***	0.08	0.61
Muslim (Reference)																		
Christian	0.15***	0.03	0.08	0.15***	0.03	0.08	0.14**	0.06	0.08	0.25***	0.04	0.14	0.18***	0.04	0.10	0.14***	0.04	0.08
Other Religion	-0.36***	0.05	-0.20	-0.23***	0.05	-0.13	-0.33***	0.07	-0.18	-0.18***	0.05	-0.10	-0.22***	0.05	-0.12	-0.23***	0.05	-0.13
Family Planning Radio				0.59***	0.03	0.33	0.46***	0.10	0.25	0.57***	0.03	0.31	0.58***	0.03	0.32	0.59***	0.03	0.32
Family Planning Television				0.21***	0.03	0.12	0.23***	0.03	0.13	0.27***	0.10	0.15	0.21***	0.03	0.11	0.21***	0.03	0.11
Family Planning Friends or Neighbors				0.29***	0.03	0.16	0.29***	0.03	0.16	0.28***	0.03	0.16	0.37***	0.11	0.20	0.28***	0.03	0.16
Family Planning Partner				0.67***	0.05	0.37	0.70***	0.05	0.39	0.67***	0.05	0.37	0.71***	0.05	0.39	0.35***	0.13	0.19
Interaction Type							Radio			Television			Friends			Partners		
Mode*Age 15-19							0.08	0.13	0.04	0.19	0.12	0.10	0.02	0.15	0.01	0.01	0.42	0.01
Mode*Age 20-24							-0.08	0.12	-0.05	0.07	0.11	0.04	-0.20	0.13	-0.11	0.13	0.17	0.07
Mode*Age 25-29							-0.04	0.11	-0.02	-0.08	0.10	-0.04	-0.18	0.11	-0.10	0.05	0.14	0.03
Mode*Age 35-39							-0.25**	0.12	-0.14	0.14	0.11	0.08	-0.25**	0.13	-0.14	-0.12	0.14	-0.07
Mode*Age 40-44							-0.35**	0.12	-0.19	-0.27**	0.12	-0.15	-0.24*	0.13	-0.13	0.25*	0.15	0.14
Mode*Age 45-49							-0.04	0.13	-0.02	0.06	0.12	0.04	-0.31**	0.14	-0.17	0.16	0.16	0.09
Mode*Never Married							0.39***	0.10	0.21	0.11	0.09	0.06	0.33***	0.11	0.18	0.16	0.23	0.09
Mode*Living Together							0.11	0.12	0.06	-0.02	0.12	-0.01	-0.05	0.15	-0.03	0.67***	0.16	0.37
Mode*Divorced or Widowed							0.33**	0.15	0.18	0.04	0.14	0.02	0.35**	0.16	0.19	-0.32	0.35	-0.18
Mode*No Education							0.16**	0.07	0.09	0.23***	0.09	0.16	0.11	0.09	0.06	0.52***	0.12	0.28
Mode*Secondary Education							-0.36***	0.08	-0.20	-0.08	0.07	-0.04	-0.03	0.08	-0.01	0.08	0.11	0.04
Mode*Higher Education							-0.78***	0.19	-0.43	-0.15	0.17	-0.08	-0.19	0.16	-0.11	-0.28	0.20	-0.15
Mode*Christian							0.02	0.06	0.01	-0.28***	0.07	-0.16	-0.14**	0.07	-0.08	0.07	0.10	0.04
Mode*Other Religion							0.18**	0.09	0.10	-0.15	0.11	-0.08	-0.10	0.13	-0.05	-0.01	0.17	-0.01
Cut 1	-2.71	0.06		-1.95	0.06		-2.06	0.09		-1.94	0.07		-1.95	0.07		-2.01	0.07	
Cut 2	-1.09	0.05		-0.29	0.06		-0.38	0.09		-0.27	0.07		-0.28	0.07		-0.35	0.06	
Cut 3	0.18	0.05		1.03	0.06		0.94	0.09		1.05	0.07		1.04	0.07		0.97	0.06	
N	21019			21019			21019			21019			21019			21019		

Includes dummy variables for surveys

Data from the Demographic and Health Surveys