# User-Centered Counseling in Contraceptive Decision-Making: Evidence from a Field Experiment in Urban Malawi\*

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#### Abstract

We conduct a randomized controlled trial to test how a woman-centered approach to counseling shapes contraceptive preferences and behavior. We explore how decisionmaking is driven by: 1) the number and types of contraceptive methods presented to women based on their own stated preferences for contraception (targeted counseling); and 2) the presence of male partners at the time of counseling. A total of 782 women were randomized to one of four treatment arms in which they received either targeted or standard counseling, cross-randomized with an invitation to bring their partners to counseling. Women were subsequently offered free transport and access to family planning for one month. Women who received targeted counseling were 15.6 percent less likely to be using their stated ideal method at follow-up and were 17.9 percent more likely to be discordant between their stated ideal method and method use at followup. Women who were encouraged to invite their partners to counseling were 14.1 percent less likely to change their stated ideal method from counseling to follow-up but 16.4 percent more likely to use their stated ideal method at follow-up. While both approaches aim to promote informed choice for family planning, neither necessarily yields strictly preferred outcomes for women.

Keywords: family planning; user-centered design; counseling; male involvement; Malawi

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# Introduction

Patient-centered decision-making is fundamental to a high-quality family planning and reproductive health program (Kols et al., 1999). In family planning, the role of the client as the key actor in her choice of contraceptive method is distinct from many other contexts in health decision-making where providers play a leading (or even exclusive) role in determining the type of care or treatment for a patient. To this end, a high-quality family planning program would prioritize women and couples to have a right to "full, free, and informed choice" over contraceptive methods<sup>1</sup>. For this reason, family planning programs dedicate significant resources into providing complete and accurate information so that women are informed of the full range of methods that are available to them. As a result, clients typically do not receive methods without receiving a consultation session with a counselor, during which time they are informed about available methods.

A large literature has highlighted the importance of counseling on decision-making in family planning and reproductive health (Athey et al., 2021; Dehlendorf et al., 2016; Kim et al., 1998; Lettenmaier and Gallen, 1987). Recent work has also shown that a woman's fertility intentions, which affect her contraceptive preferences, may be unstable over her reproductive lifetime and are sensitive to relatively small changes in her environment (Johnson-Hanks et al., 2018; Sennott and Yeatman, 2012). A woman might therefore change her mind frequently over a relatively short time such that her initially stated preference for contraception (what she says that she will do) could differ greatly from her actual choice of method (what she actually does).

<sup>&</sup>lt;sup>1</sup>The prioritization of "informed choice" in family planning was highlighted as a central part of the Programme for Action (PoA) in the 1994 International Conference on Family Planning (ICPD) in Cairo, which provided a global forum for reshaping the population policy discourse away from a "population control" narrative and towards a rights-based approach to family planning and reproductive health (UNFPA, 2014). Recent work by Newman and Feldman-Jacobs (2015), Senderowicz (2020), and others have updated this definition to include "full, free, and informed choice" and have also proposed approaches to integrate this framework into existing and future programs.

To date, little is known about how the choice architecture for contraception, the structures and processes through which information and services are presented during counseling, shape women's and couple's preferences and characterize how women actually make informed choices about 1) their decision whether or not to contracept; and 2) their choice of contraceptive method (Miller et al., 2020). Because of the high value placed on choice, counselors may be prescribed to discuss as many as 15 different methods and to describe as many as 10 method-specific attributes (e.g. effectiveness at preventing pregnancy, convenience to use, risk of side effects, duration of effectiveness, among others) for each method with a client during a single session. This information-intensive approach to counseling, which compels a client to interpret a large volume of information across multiple dimensions, may in fact be counterproductive to the counseling process by reducing the salience of counseling while simultaneously increasing the potential for choice overload (Iyengar and Kamenica, 2006). Given that a stated goal of programs is to be able to meet women's reproductive health needs, being able to effectively link a woman's stated preferences for contraception to her eventual contraceptive behavior would have significant implications for service provision.

To achieve full, free, and informed choice, family planning programs have increasingly adopted user-centered approaches to service delivery. These approaches have stressed the role of the individual client as the focal point of interaction and key decision-maker. In this approach, service providers play a supporting role to ensure that 1) a client's preferences and any changes to her preferences are elicited; 2) the flow of information and interactions between a client and her provider is bi-directional and dynamic; and 3) the optimal outcome exclusively reflects the client's underlying reproductive health objectives and is absent of bias or constraint (Costello et al., 2001). However, such counseling approaches have been found to be time-consuming and difficult to scale up to larger client bases.<sup>2</sup> More generally, there

<sup>&</sup>lt;sup>2</sup>For example, the Balanced Counseling Strategy toolkit, developed by the Population Council, includes: 1) an algorithm that summarizes the 11 steps needed to implement the strategy, 2) counseling cards with basic information about 15 family planning methods, plus a card with the checklist to be reasonably sure a woman is not pregnant, and 3) brochures on each of the methods

is little systematic evidence on the effectiveness of these approaches in meeting women's contraceptive preferences (i.e. achieving contraceptive concordance).

# Study Objectives

In this study, we identify the causal impact of user-centered approaches to family planning counseling on women's contraceptive preferences and decision-making by means of a randomized controlled trial. In particular, we investigate two channels that have been hypothesized to play a role in contraceptive decision-making, and particularly concordance between women's use (or non-use) of contraception and their stated contraceptive preferences. We first explore the role of targeted, tailored counseling that seeks to improve salience and reduce cognitive overload. In addition, we investigate the role of male involvement in counseling. Studies have shown that men's attitudes towards family planning play a key role in shaping women's sexual and reproductive health behaviors (Ashraf et al., 2014; Bawah, 2002; D'Exelle and Ringdal, 2022; El-Khoury et al., 2016; Jejeebhoy et al., 2015; Link, 2011; Sternberg and Hubley, 2004). Moreover, men are also important as family planning clients and have their own sexual and reproductive health needs and concerns, which also deserve the attention of the health care system and providers. To date, experimental studies of male engagement in family planning have focused on how the inclusion of men affects women's receipt of counseling (D'Exelle and Ringdal, 2022) or contraceptive use (Ashraf et al., 2014). However, less is known about how giving women the choice ex ante whether to involve (or exclude) their male partners affects men's participation in counseling and the couple's subsequent behavioral outcomes.

We find that short, tailored counseling induces women to change their stated ideal contraceptive method, particularly for those women who were already using contraception at the time of counseling. However, tailored counseling does not result in a substantive change

that are presented to the client.

to a woman's contraceptive method use; in fact, we find some evidence to suggest that tailored counseling may reduce the likelihood of contraceptive adoption among those women who were non-users. We observe a higher level of discordance between women's stated ideal method and actual method use following their receipt of targeted counseling, particularly among contraceptive users. This finding suggests that targeted counseling may allow a woman to report a new method as ideal. On the other hand, offering shorter counseling may also contribute to decision deferral, particularly if the limited number of methods presented do not provide enough choice for a woman to switch or adopt methods. As a result, even if a woman is not satisfied with her current method or her non-use, she may not have a sufficient incentive to identify an alternative.

Women who were encouraged to invite their partners to counseling are less likely to change their stated ideal method, particularly if their partners are satisfied with their prior contraceptive use. On the other hand, women who were encouraged to invite their partners to counseling are more likely to be concordant between their stated ideal method following counseling and their eventual method use. Taken together, the presence of the partner seems to allow women to follow through and switch to their stated method from counseling. In recognizing that her partner may participate in counseling, should she choose to invite him, the way in which a woman may report and subsequently act on her contraceptive preferences will likely change simply due to her partner's presence. As a result, a woman's decision to invite and involve her partner to counseling may likely depend on whether 1) she believes that her partner's contraceptive preferences are concordant with her own; and 2) she believes that her partner is supportive in her contraceptive decision-making. To this end, we find that a partner's presence may not necessarily improve the level of concordance between a woman's own stated preferences and her eventual contraceptive behavior. Rather, a woman whose partner attends counseling may report a higher level of concordance based on whether the method that is eventually adopted is reflective of both her preferences and her partner's contraceptive preferences jointly, rather than solely her own individual preferences.

Our findings contribute to a nascent evidence base that brings together insights from the behavioral sciences to better inform reproductive health decision-making. In addition to facing structural barriers to accessing family planning, women face cognitive biases that hamper care-seeking and uptake of reproductive health services. Key biases include information overload, present bias, and anchoring, which may each contribute to decision deferral and regret (Ashton et al., 2015). Our tailored intervention is informed by evidence that these biases exist at the time of family planning counseling, which is often a woman's point of entry into care. Our study also examines problems of intra-household bargaining in the context of contraceptive decision-making. Building on collective models of the household (Chiappori and Mazzocco, 2017), we examine how shifting the choice to women over their partner's involvement in counseling impacts: a) women's decision whether or not to involve their partners, and b) subsequent care-seeking and uptake of services. Finally, our study speaks to an ever-lively literature on the concordance between stated preferences and subsequent revealed behavior. We benefit from a multi-point follow-up strategy to be able to assess the relative stability (or lack thereof) in women's preferences over time following counseling. Moreover, our intervention, which was designed to eliminate key structural barriers to access, allows us to observe the extent to which women are able to follow through on their stated choice.

The rest of the paper is organized as follows. In Section 3, we present an overview of the literature in user-centered counseling and male involvement in family planning, and we describe our contributions to the evidence base within these domains. Section 4 describes our experimental design and data. Section 5 describes the empirical strategy. Section 6 presents and discusses our descriptive and experimental findings, and we conclude in Section 7.

# Background

### User-Centered Approaches in Family Planning

Programs and interventions that have successfully incorporated user-centered approaches are often informed by insights from the behavioral sciences, including sociology, economics, and cognitive psychology. A number of studies in economics, marketing, and management have examined the role of user-centered design and choice architecture on decision-making (Hensher, 2006; Hogarth and Einhorn, 1992). Deck and Jahedi (2015) notes that cognitive load (and overload) may lead to more risk-averse behavior, higher levels of impatience, and a higher likelihood among individuals to anchor their beliefs and prioritize information that is offered to them first when making decisions. Bordalo et al. (2012) demonstrated that consumers who are at risk of cognitive overload are more likely to overweigh attributes or features that stand out more (are more salient) to them over the range of choices that they face. When faced with a small number of well-defined alternatives, individuals tend to examine all attributes across all presented alternatives, and then make trade-offs when necessary. However, when the choice set gets large, strategies such as structuring complex choices into a certain order or adopting other heuristics are often employed (Iyengar and Kamenica, 2006). As the number of choices increases, framing and choice architecture are therefore more likely to affect decision-making (Thaler et al., 2010). Limiting complexity may, in turn, be preferred and welfare-improving.

User-centered design (UCD) approaches to product and program development have been adopted in a range of fields and disciplines, including architecture, marketing, organizational behavior, and, more recently, human-robot interaction (HRI) research (Doroftei et al., 2017; Reich-Stiebert et al., 2020). Recently, UCD approaches have received increased at-

<sup>&</sup>lt;sup>3</sup>In exploring the role of UCD on teamwork, coordination, and group-level outcomes, a study by Lai et al. (2010) finds that increased engagement between users, combined with user-dictated interactions, can improve outcomes. Similarly, Oviatt (2006) finds that human-centered design

tention in the health sector, particularly in the development and implementation of new health programs and services (Dabbs et al., 2009; Johnson et al., 2005; Ratwani et al., 2015; Rodriguez et al., 2007). In the context of family planning, however, the inclusion of user-centered approaches is scarce, which is surprising when considering that contraceptive decision-making is preference-sensitive (Dehlendorf et al., 2017). With the goal of introducing a more patient-centered approach to contraceptive counseling, Dehlendorf et al. (2017) developed a tablet-based contraceptive decision support tool, "My Birth Control," to facilitate shared decision-making between providers and patients. An assessment of this decision support tool by Holt et al. (2020) finds that the tool encouraged providers to incorporate clients' method preferences into discussions of birth control, which may serve to improve patient-provider relationships in counseling without the need for extensive provider training. Most recently, evidence from an evaluation by Athey et al. (2021) in Cameroon finds that shared decision-making, in which a client first receives counseling on a method that is most aligned with her stated fertility and contraceptive preferences, increases women's uptake of long-acting reversible contraceptives (LARCs), particularly when accompanied by financial discounts.

A few user-centered approaches to family planning counseling have been tested in low-income settings. One such approach, the Balanced Counseling Strategy (BCS), was developed to be an interactive, client-friendly approach to counseling that uses job aids, an algorithm (decision-tree), a set of counseling cards on methods, and corresponding brochures for each method (León et al., 2008; Population Council, 2012). A recent evaluation of the BCS finds that the approach was linked to increased postpartum family planning use, especially among women who received support from husbands (Hasyati et al., 2020). While interest in BCS and other user-centered approaches to counseling has grown over time, rigorous evidence of their impact on outcomes of choice and decision-making has been limited.

of interfaces minimizes users' cognitive load, and effectively frees up users' mental resources to improve performance.

We hypothesize that a user-centered counseling approach - which tailors counseling to a woman's most valued attributes and preferred methods - may allow her to reinforce and better realize her contraceptive preferences.

### Male Involvement in Family Planning

Spousal and familial preferences for family planning have been identified as a key determinant of women's own access to and use of family planning. Studies have shown that men are not actively engaged in most issues of maternal and child health, and particularly in issues concerning reproductive health (Sharma et al., 2018). Men's limited involvement in and reluctance to support family planning might be explained by: 1) perceived side effects of female contraceptive methods, which may disrupt sexual activity, 2) the limited choice of available male contraceptives, 3) general perceptions that reproductive health is considered to be "a woman's domain" and is of little relevance or concern for men, 4) discordance in preferences for children, and 5) concerns that women' contraceptive use may lead to promiscuity and extramarital sexual relations (Adelekan et al., 2014; Kabagenyi et al., 2014). To date, however, the role of men in family planning decision-making remains poorly understood, particularly in low- and middle-income settings.

A number of studies (El-Khoury et al., 2016; Sternberg and Hubley, 2004) have shown that including men in family planning counseling may increase women's use of family planning services through two potential channels. First, counseling provides men with information on methods or services, including services that women may demand (Lundgren et al., 2005; Shattuck et al., 2011). In addition, counseling husbands and wives together provides a platform for increased spousal communication and offers couples the opportunity to discuss their fertility and method preferences (Hartmann et al., 2012; Lasee and Becker, 1997; Sharan and Valente, 2002). These findings are also confirmed in a series of cross sectional studies that find a positive link between spousal communication and contraceptive use (Bawah, 2002; Jejeebhoy et al., 2015; Link, 2011; Oni and McCarthy, 1991).

To date, experimental evidence on spousal concordance and the role of men in family planning decision-making remains mixed, particularly in low- and middle-income settings. A few impact evaluations have found that involving or targeting men as part of the counseling process may lead to increased engagement with family planning services and higher contraceptive uptake. On the other hand, evidence from a field experiment in Zambia finds that women who were given a voucher for family planning services together with their husbands, when compared to women who were given the voucher alone, were less likely to seek family planning services and use contraception and were more likely to have a pregnancy (Ashraf et al., 2014). In contrast, a trial in Tanzania by D'Exelle and Ringdal (2022), who follow the Ashraf et al. (2014) design by randomizing couples into three treatment groups (wife only, husband only, and couple), find that shifting family planning decision-making to husbands or having the couple make decisions jointly increases the likelihood of attending a counseling session and using contraceptives.

Our approach to male involvement is most closely related to the D'Exelle and Ringdal (2022) approach; however, our design is distinct in two critical ways. Firstly, women in our study who are assigned to the partner involvement treatment arms are given the choice ex ante to invite (or not invite) their partners to counseling. This approach differs from most prior male involvement studies, including those by D'Exelle and Ringdal (2022) and Ashraf et al. (2014), in which couples who were willing and jointly consented to participate (and perhaps even be counseled) together by construction constitute a selected sample; specifically,

<sup>&</sup>lt;sup>4</sup>A study in Jordan in which women were randomly assigned to receive individual counseling or joint counseling with their husbands finds that receipt of couples counseling led to a higher uptake of modern methods compared to no counseling, but uptake was not significantly different from receiving individual counseling (El-Khoury et al., 2016). A study in Ethiopia finds that a greater proportion of couples who were jointly visited by a counselor at home were using modern contraceptives following the home visit (Terefe and Larson, 1993). In Malawi, a peer-delivered educational intervention that exclusively targeted men shows that male involvement leads to increased contraceptive use (Shattuck et al., 2011). More recently, a field experiment in rural Tanzania finds that women who consulted with a family planning counselor together with their husbands experienced a larger reduction in pregnancies and a larger increase in reported contraceptive use (McCarthy, 2019).

these couples, and particularly the male partners who self select into counseling, would not be representative of the average couple or man, who are often absent from the counseling process. To this end, an evaluation of a user-centered program that gives women the choice whether or not to invite their male partners would more accurately reflect women's demand for joint family planning counseling. Secondly, we differ from previous studies in that we do not provide any direct financial incentive or monetary payment (i.e. no direct transfer of cash) to participants for any services or to cover any costs incurred, which serves to minimize any coercion through income effects.

### Family Planning Counseling in Malawi

Contraceptive counseling with a service provider is predominantly the first step for women to learn about, choose, and receive family planning services.<sup>5</sup> In public health facilities in Malawi, women typically receive an initial group counseling session with a nurse or counselor followed by a brief (an estimated 3 to 5-minute) individual counseling session at which time they may receive a contraceptive method. As per the guidelines that are set by the Ministry of Health (MOH) and the Malawi Reproductive Health Directorate (RHD), a family planning counseling session is typically administered to women with a family planning flipchart (Figure A.4), which describes 13 contraceptive methods that are organized in order of method effectiveness to preventing pregnancies, starting with female and male sterilization, and concluding with traditional methods of contraception (Malawi Ministry of Health, 2009). Given the limited time for individual counseling, there is often little opportunity for women to receive clarification or follow-up that they may seek; meanwhile, service providers, who are time constrained, may not be able to fully elicit a woman's family planning and fertility preferences before providing her with counseling that best align with her preferences.

<sup>&</sup>lt;sup>5</sup>As per the reproductive health service delivery guidelines in Malawi, counseling is an interactive process in which the provider listens to the client's needs, tries to elicit the client's concerns, and offers relevant information to enable the client to make informed decisions (Malawi Ministry of Health and Malawi Reproductive Health Directorate, 2014).

Finally, most counseling sessions in Malawi, particularly group counseling, are exclusively targeted to female clients, with few opportunities for men to participate in the process.

# Experimental Design and Data

### Experimental Design

Our study is a four-arm randomized controlled trial that was conducted with a sample of 782 women from Lilongwe, Malawi. Additional details of the study setting can be found in Section B in the Appendix. A baseline survey was implemented from July to September 2019, which was followed by a three-month family planning counseling intervention that was rolled out from September to December 2019. Immediately after the counseling session, women were offered a free package of family planning services for a month, which included free transportation to a local private clinic and reimbursement for all family planning services. A follow-up survey was administered with women either at the clinic, by phone, or through a home visit after one month of exposure to the intervention. Figure 1 outlines the general framework of the entire field experiment, and details of the experiment can be found elsewhere (Karra and Zhang, 2020).

#### Figure 1 About Here.

# Sample

We screened 1,122 households and obtained an initial sample of 782 women who, at the time of the baseline survey: 1) were married; 2) were between the ages of 18 and 35; 3) lived in the city of Lilongwe (permanent residents); 4) were not pregnant and had not given birth in the 6 months prior to the initial screening; 5) had neither been sterilized nor had a hysterectomy; 6) had given birth to at least one child (one live birth) in their lifetime and 7) lived with their husbands at the time of the screening. These criteria were designed to identify women who were most likely to have a demand for contraception. Given that

randomization was administered at the individual woman level, only one eligible woman was selected from each household in order to minimize possible contamination across intervention and control arms.<sup>6</sup>

#### Randomization and the Intervention

### Counseling Session - Introduction

Following the baseline survey, women who participated in the study were randomized into one of four experimental arms: a control group (T0, N = 108), an intervention group in which women were encouraged to invite their partners to counseling (T1, N = 223), an intervention group where women received short, tailored counseling (T2, N = 225), and an intervention group where women received both tailored counseling and encouragement to invite their partners (T3, N = 228).

All women who were randomized were offered one free, private family planning counseling session in their homes. We enlisted the support of the Malawi RHD and several international nongovernmental organizations who work on family planning in Malawi to help us develop training materials and counseling resources.

# Pre-Counseling Survey

Just before each counseling session was administered, counselors conducted a short survey to confirm women's pregnancy status, contraceptive use, fertility preferences, and stated contraceptive preferences.

<sup>&</sup>lt;sup>6</sup>If multiple women from the same household were potentially eligible to be recruited, we chose the youngest eligible woman to participate. We also ensured that the selected participants were sufficiently distant (at least five households apart) from each other, which also served to minimize spillover effects between treated and control women who lived in the same neighborhood.

# Counseling for Control Group T0

Following the pre-counseling survey, women who were assigned to the control arm T0 were counseled on the full range of 13 available family planning methods. Counselors employed the standard-of-care contraceptive method flipchart that is provided by the MOH and RHD to counsel women on each method, following the order of methods in the flipchart.

# Counseling for Intervention Group T1

Women who were assigned to intervention arm T1 were encouraged by the counselor to invite their husbands / male partners to participate in a joint family planning counseling session. Following the invitation, women and their partners (if they chose to invite them) jointly received counseling on the full range of 13 available family planning methods with the same standard counseling flipchart used by counselors in intervention arm T0.

### Counseling for Intervention Group T2

Women who were assigned to intervention arm T2 were counseled on a targeted number of methods that were chosen based on the respondent's reported preferences before counseling. The objective of this intervention arm was to minimize choice overload and increase the salience of a woman's most preferred method attribute. At baseline, each woman was asked to assign a relative ranking to her top three most valued attributes in choosing a contraceptive method (e.g. does she prefer that a method has a lower incidence of side effects, a method that is more effective at preventing pregnancy, etc.). Based on her ranking of method attributes, the counselor confirmed the top attribute that the woman reported before counseling and used a pre-designed tailored flipchart (an abbreviated version of the full flipchart) to present a subset of up to 5 methods that ranked highest along the reported attribute. Methods that were presented on each of the attribute-specific flipcharts were assigned based on classifications from a recent technical consultation conducted by the World Health Organization (WHO) and the United States Agency for International Development

(USAID) (Festin et al., 2016). Particular emphasis was placed on making the order of presentation salient, whereby women were reminded and primed to consider the relative ranking of methods along their stated attribute. Counselors then counseled women on the subset of methods.

### Counseling for Intervention Group T3

In a similar fashion to intervention arm T1, Women who were assigned to intervention arm T3 were encouraged by the counselor to invite their husbands / male partners to participate in a joint family planning counseling session. Prior to counseling, counselors also confirmed the woman's highest ranked attribute. In following the counseling protocol for T2 women, the counselor then counseled the woman (and her partner, if he was invited) on a targeted subset of up to five contraceptive methods that most closely aligned with her most preferred attribute using a tailored, condensed flipchart.

# Post-Counseling Survey

Immediately following the counseling session, counselors conducted a brief survey with all women to assess their experiences with counseling and to document changes to women's preferred choice of contraceptive method before and after counseling.

# Post-Counseling Package of Services

Following the post-counseling survey, all women and their partners who participated in counseling were offered the following package of services for a stated one-month period:

1. Transportation Service: Women and invited partners were offered a free transportation service from their homes to the Good Health Kauma Clinic, a high-quality private family planning clinic in Lilongwe. The transportation service was provided by a taxi driver who was hired for the duration of the study. Respondents could make an

appointment with the driver through a project field manager<sup>7</sup>, who would coordinate transport with the driver to the Kauma Clinic during the clinic's working hours.

2. Financial Reimbursement for Family Planning Services: Women and participating partners were financially reimbursed for any out-of-pocket expenditures that they incurred for receiving family planning care at the Kauma Clinic. Costs that were eligible for reimbursement included procurement costs of contraceptive methods, consultation fees, lab test fees, treatment costs for any contraceptive-related side effects and contraindications, and expenses associated with switching and discontinuation of methods. Each couple was allocated a reimbursement amount of 17,500 MWK (\$25.00 USD), which could be redeemed by the couple over multiple visits at the clinic.

## Follow-Up

All women were resurveyed with an abbreviated version of the questionnaire that was administered at baseline after one month of exposure to the post-counseling services. Follow-up surveys were administered in three phases: 1) a clinic-based survey that was administered to all women (and participating husbands) who visited the Kauma Clinic; 2) a phone follow-up survey that was administered to women who did not visit the Kauma Clinic; and 3) a home-based follow-up survey that was administered to women who did not visit the Kauma Clinic and who were unavailable for a phone survey.

Our final analytic sample is comprised of 675 women<sup>8</sup> (86.3 percent of the baseline sample) who were offered the intervention and who participated in at least one of the follow-up

<sup>&</sup>lt;sup>7</sup>All participants were provided 100 MWK in mobile credit, which covered any communication costs between the participant, field team, and driver.

<sup>&</sup>lt;sup>8</sup>As per the eligibility criteria for the study, women who reported that they were not pregnant at the time of the baseline screening were eligible for the study. At the time of counseling, however, 17 women reported that they had become pregnant since baseline, and 20 women reported that they were pregnant when they were interviewed at follow-up. For these women, no information on their current method use is collected, and hence they are excluded from analyses that use these variables as outcomes.

surveys. Figure A.1 presents a participant recruitment and retention flowchart that indicates how our final analytic sample was derived. Table F.5 compares women in our final analytic sample to those women who attrited over the study period. We note that attritors are slightly (1.22 years) younger than non-attritors, and a higher proportion (7 percentage points, p.p.) of non-attritors reported having male partners who were supportive of their use of family planning methods relative to attritors. In general, however, we do not find significant evidence of differential loss to follow-up across observable characteristics.

# **Key Outcomes**

We investigate the effect of our two interventions on four primary outcomes:

- 1. An indicator of whether a woman's stated ideal method changed between counseling and follow-up.
- 2. An indicator of whether a woman's contraceptive method use changed between counseling and follow-up.
- 3. An indicator of whether a woman's stated ideal method at the end of counseling is discordant with her actual method use at follow-up.
- 4. An indicator of whether a woman's stated ideal method at follow-up is discordant with her actual method use at follow-up.

Table A.1 describes each of these outcomes in more detail. Each outcome aims to capture the extent to which our user-centered approaches to counseling impact both women's stated preferences and subsequent contraceptive behavior. By measuring discordance, we also infer the extent to which women were, in fact, able to translate their preferences into behavior.

# **Empirical Specifications**

Our main empirical specification is comprised of an intent-to-treat (ITT) analysis using our endline analytic sample as follows:

$$Y_{1,i} = \alpha_1 + \beta_S \cdot Short_i + \mathbf{X_i} \mathbf{\Gamma_1} + \varepsilon_{1,i}$$
 (1)

$$Y_{2,i} = \alpha_2 + \beta_H \cdot Husb_i + \mathbf{X_i} \mathbf{\Gamma_2} + \varepsilon_{2,i} \tag{2}$$

where  $Y_i$  is the outcome variables of interest;  $Short_i$  is an indicator of assignment to the short, tailored counseling intervention arm;  $Husb_i$  is an indicator of assignment to the partner invitation intervention arm; and  $\mathbf{X_i}$  is a vector of individual-level control variables that are measured at baseline, including age, baseline contraceptive use, a woman's most preferred method attribute at baseline, her total number of children ever born, educational attainment, work status, and ethnicity. Table A.1 describes these variables in detail. Our adjusted analyses also include area fixed effects, and we present heteroskedastic-robust standard errors in all specifications.

# Results

# **Descriptive Statistics**

## Sample Balance

Table 1 presents a balance table across the four intervention arms by baseline covariates. The first panel in the table compares the sample of women who were randomized to either the partner invitation (T1 or T3) or no partner invitation (T0 or T2) treatment arms, and the second panel compares the sample of women who were randomized to either the short counseling (T2 or T3) or standard counseling (T0 or T1) treatment arms. We find evidence of balance by a range of baseline covariates across each of the respective treatment arms.

#### Table 1 About Here.

### Sample Description

Out of 782 women who were interviewed at baseline, a total of 679 respondents (87 percent) reported that they were using a contraceptive method. The distribution of contraceptive methods among all women (the contraceptive method mix) is presented in the first column of Table A.2. Around 45 percent of women (or 51.4 percent of current users) reported using injectables, which is consistent with national estimates showing injectables as the most popular contraceptive method in Malawi (National Statistical Office (NSO) and ICF Macro, 2017). Implants are the second most commonly used contraceptive method among current users (30 percent of all women, or 34.6 percent of current users), followed by oral contraceptive pills (7 percent of all women, or 8.2 percent of current users).

To better understand women's preferences for contraception and decision-making around methods, respondents were asked to identify and rank the attribute(s) that were most important to them when considering a contraceptive method. Women could report up to three attributes that they preferred in an ideal contraceptive method. A total of 413 women (53 percent) cited method effectiveness as the most important attribute to consider when choosing a contraceptive method, while 13 percent of women reported the prevalence of side effects in a method to be their most valued attribute, and 11 percent of women identified method duration to be the most important attribute. Table A.3 presents the distribution of women's most valued attributes for contraceptive methods as well as the corresponding tailored flipchart that was used to counsel women who were assigned to the tailored counseling group.

Following the elicitation of preferred attributes, each woman was given twenty counters and was asked to place the counters on a placemat that listed each of their top three attributes. Women were asked to distribute counters across all attributes based on the level of significance with which they put on that particular attribute in choosing a method. If

a woman mentioned fewer than three attributes, she was asked to assign counters only to those attributes that she chose. Among the 777 women who responded, around 59 percent of women placed all twenty counters on their top attribute (Figure A.2), suggesting that the first attribute that they mentioned was the primary (if not only) determining factor when choosing a contraceptive method.

# Women's Counseling Experience

A list of tailored flipcharts that were used in the short counseling process, along with their corresponding attributes, is presented in Figure A.5 and A.6. The blue flipchart, which presents the subset of methods that are classified to be the most effective in preventing pregnancy, was the most commonly used flipchart to counsel women who were assigned to the short, tailored counseling sessions (Table A.3). Data on counseling times for each treatment arm is presented in Section D.

Among the 638 women who received both a counseling session and who were successfully followed up, 67 women visited the Good Health Kauma Clinic during the intervention period to receive family planning services. For the remaining 571 women who did not visit the clinic, they were interviewed through either a phone-based or a home-based survey at least 31 days after the counseling session. To this end, we are able to guarantee that each woman was given at least one month to visit our partner clinic and use any family planning services that were available at the clinic before they were contacted at follow-up.

# Partner Engagement

Among 701 women who were reached for counseling and who consented to continue with the study, 401 women were encouraged to invite their partner to counseling, and 112 women had their partner attend counseling. Prior to starting the counseling session, the counselor conducted a private interview with the partner to elicit his fertility preferences and prior contraceptive use. Specifically, the counselor elicited the partner's most valued attribute(s) when choosing a contraceptive method and his most preferred contraceptive method (for

either himself or for his wife). Column (3) of Table A.2 presents the distribution of male partners' stated ideal contraceptive method, and Figure A.7 presents the distribution of their most preferred attribute. From Table A.2, 45.5 percent of partners chose implants as their stated ideal contraceptive method, followed by injectables (34.8 percent). In a similar fashion to their wives, 45.5 percent of interviewed partners chose effectiveness at preventing pregnancy as their most important method attribute, followed by "no risk of harming health" (28.6 percent) and method duration (16.1 percent).

#### Main ITT Results

In the experimental results that follow, we present four main types of findings. First, we explore the extent to which a short, tailored counseling compels women to: a) switch their stated ideal method, and b) follow through on their choice of ideal method. Second, we investigate the extent to which partner invitations induce women to: a) invite their partners, b) switch their stated ideal method (possibly in response to their partner's presence), and c) follow through on their choice of ideal method. Third, we conduct subgroup analyses to identify heterogeneity in intervention impact and explore potential mechanisms underlying the observed treatment effects. In the Appendix, we discuss potential interaction effects of the two interventions.

# Short Counseling

Table 2 presents the intent-to-treat (ITT) results of the impact of short, tailored counseling relative to the standard counseling practice on outcomes for the full analytic sample. Column (4) of Panel A shows that women who were assigned to short counseling were 4.3 p.p. (control mean: 0.42) more likely to change their stated ideal method between counseling and follow-up compared to women who were assigned to the standard counseling group. While these estimates are not significant at conventional levels, the signs of the effects are consistently positive throughout the analysis. Furthermore, women who received short counseling were no more likely to change their method use from counseling to follow-up (Table 2, Panel B).

When examining discordance, we observe that women who received short counseling were 6.7 p.p. (control mean: 0.43) more likely to be discordant between their reported ideal method following counseling and their observed method use at follow-up (Column (4) of Table 2, Panel C). Similarly, women who received short counseling were 9.3 p.p. (control mean: 0.52) more likely not to report their method use at follow-up as ideal (Column (4) of Table 2, Panel D). Taken together, these findings suggest that women who received short counseling were more likely to express dissatisfaction with their contraceptive use at follow-up. Moreover, since women were not altering their method use over time, it is possible that short, tailored counseling may have acted as a salient reminder of women's inability to act on their latent method preferences and, as a result, may have exacerbated their level of discordance or dissatisfaction with their current method use.

#### Table 2 About Here.

#### Partner Invitations

We next explore how the partner invitation intervention affects women's stated preferences for contraceptive methods and their realization of these preferences over time.

Column (4) of Panel A of Table 3 shows that women who were assigned to the partner invitation group were 6.9 p.p. (control mean: 0.49) less likely to change their stated ideal contraceptive method from counseling to follow-up. These findings contrast with the results from our short counseling intervention, where women who received tailored counseling were more likely (though not significantly) to change their choice of stated ideal method over time.

Next, women who were assigned to the partner invitation arm were 3.5 p.p. (control mean: 0.16), but not significantly, more likely to switch their method use between counseling and follow-up (Column (4) of Table 3, Panel B)<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup>We also conduct an instrumental variable (IV) analysis of the main effects of the partner

Column (4) of Panel C of Table 3 shows that, in contrast to short counseling, women who were assigned to the partner invitation group were 8.7 p.p. (control mean: 0.53) less likely to be discordant between their stated ideal method immediately following counseling and their actual method use at follow-up. These findings suggest that inviting partners to counseling may have served as an effective incentive for women to realize their stated method preferences following the counseling session. While women who were assigned to the husband invitation group were more likely to report a reduction in discordance between their post-counseling stated ideal method and follow-up method use, we find these women's level of discordance at follow-up to be no different from that experienced by women who were not encouraged to invite their partner (Column (4) of Panel D of Table 3). This finding implies that although women were more likely to realize their stated preferred method in the presence of their partner, the choice of the stated method may have been induced by their partner's presence and may no longer be reflective of a woman's own contraceptive preference. We test this conjecture in Section 6 by stratifying women into two groups based on their partner's satisfaction with their method use at baseline.

Taken together, our findings highlight a key trade-off that women may face when seeking family planning. Women who have a preference for using contraception may consider inviting their partners to counseling if they believe that their partners are supportive of their contraceptive use and would provide them with the means to seek services. However, in recognizing that their partners may also have their own contraceptive preferences, women may be compelled to adjust their preferences, and particularly their stated preferences, for contraception to be more concordant with their partner's preferences. As a result, under the circumstance that a woman and her male partner have different contraceptive preferences, women would be more likely to change their stated preferences to be aligned with their

invitation intervention on the same outcomes, where we use the random assignment to partner invitation groups as an instrument for the partner's presence at counseling. The stronger and positive two-stage least squares (2SLS) estimates in Panel B of Table A.4 suggest that partner invitations may have compelled women to switch to another method over time.

partner's stated preferences. Given that the option to invite male partners does not induce women to act on their own individual contraceptive preferences, these women were more discordant between their stated ideal preferences and method use due to the lack of partner support. Section J in the Appendix provides more evidence for this channel by examining the impact of the partner invitation intervention by method type.

#### Table 3 About Here.

### Subgroup Analysis

In this section, we present several subgroup analyses to identify underlying variation in the impacts of the short counseling intervention and the partner invitation intervention. We run stratified analyses based on women's prior contraceptive use and male partner satisfaction with women's contraceptive use. We also present stratified analyses by women's contraceptive method type in the Appendix.

# Women's Prior Contraceptive Use

Short, Tailored Counseling

To understand the means through which the short counseling intervention may have affected outcomes, we stratify the sample of women by non-users (Table 4) and current users (Table 5) of contraception, respectively.

Among baseline non-users of contraception, short, tailored counseling does not induce women to change their stated ideal preference for non-use over time (Table 4). In contrast, tailored counseling may likely have an impact on women's likelihood of adopting a contraceptive method. Specifically, women who were not using any method at the time of counseling and who received short, tailored counseling were 24.5 p.p. (control mean: 0.48) less likely to adopt a contraceptive method from counseling to follow-up. The fact that non-users of contraception who received a tailored counseling session were marginally less discordant at counseling and were no more discordant at follow-up between their non-use and stated ideal

method suggests that the short, tailored counseling intervention may have served to reinforce these women's underlying preference for, and subsequently realized, non-use of contraception.

#### Table 4 About Here.

Among baseline current users of contraception, the short, tailored counseling intervention significantly increases women's likelihood to change their stated ideal method over the counseling session (from pre-counseling to post-counseling), but this change in women's stated preferred method does not translate to a change in their actual method use (Panel A of Table 5). Specifically, we observe no impact of tailored counseling on switching or discontinuation behavior among women who were already users of contraception at the time of counseling. As a result, these women were more likely to be discordant between their stated ideal method and method use following counseling (Panel B of Table 5).

#### Table 5 About Here.

#### Partner Invitations

Among non-users of contraception, the partner invitation intervention does not have a significant effect on changes to their stated ideal method or changes to their method use over time. However, non-users of contraception who were assigned to the partner invitation intervention were 14.7 p.p. more likely to be discordant at follow-up (control mean: 0.81) (Table A.11).

Among current users, women who were assigned to the partner invitation arm were significantly less likely to change their stated ideal method from pre-counseling to post counseling sessions (6.9 p.p, control mean: 0.24), and even more so between counseling and follow-up (8.5 p.p, control mean: 0.50). In contrast, we do not observe a significant impact of the partner invitation intervention on the switching or discontinuation behaviors of current users of contraception. As is shown in Panel B of Table A.12, women who were assigned to the partner invitation intervention were strongly less likely to be discordant between their

stated ideal method and method use at both the counseling stage and follow-up, which may reflect the *ex ante* alignment between their method use and their partner's stated ideal method (Table A.12).

### Partner Satisfaction with Women's Method Use

We now examine possible pathways through which partner invitations may have contributed to women's contraceptive decision-making following counseling. We first stratify women into two groups by their partner's level of satisfaction with their contraceptive (non-)use at baseline. Among women whose partners were satisfied with their method (non-)use, the offer to invite their partners to counseling significantly reduced these women's likelihood of changing their stated ideal contraceptive method following counseling. However, these women were no more likely to change their contraceptive method over time and were less likely to be discordant between their stated preferred methods and actual method use (Panel B of Table 6). This improvement in concordance is most likely derived from the ex ante alignment of women's preferences with their partners' preferences, rather than from changes to women's contraceptive behavior. From Panel B of Table 6, we clearly observe higher levels of concordance between these women's stated ideal methods and method use following counseling. Moreover, the method used by these women during counseling was more likely to remain as their stated ideal choice of method at follow-up, underscoring a consistent degree of alignment between their stated preferences and behavior over time.

#### Table 6 About Here.

For women whose partners were not satisfied with their contraceptive method use (or lack thereof) at baseline, the partner invitation intervention induced these women to change their stated ideal method more frequently across the intervention and follow-up period. However, the offer of partner invitations does not induce these women to change their use of contraceptive methods, resulting in higher contraceptive discordance at follow up (Table 7). This is in salient contrast to those women whose method use was aligned with their partner's

preferences and, as a result, were more likely to be concordant. Specifically, we observe that these women were already exhibiting significant discordance between their method use and their stated ideal method at the time of counseling, which may reflect the lack of partner support over their method use *ex ante* (Panel B of Table 7).

Taken together, the findings from Tables 6 and 7 provide suggestive evidence that women's satisfaction with their actual method use hinges upon their partner's satisfaction with their choice of method; any misalignment in preferences and use may induce women to change their stated preferences for methods, rather than their actual method use, to be better aligned with their husband's preferences but at the cost of being more discordant with their own preferences.

#### Table 7 About Here.

### Conclusions

By means of a randomized controlled trial, we explore how user-centered approaches to contraceptive counseling shape women's preferences and affect subsequent decision-making around family planning. We implement two interventions, a shorter, tailored counseling session and a partner invitation intervention, to women in urban Malawi. Women who were assigned to short, tailored counseling are less likely to be using their stated ideal method following counseling and are significantly more likely to be discordant between their stated method preferences and actual contraceptive behavior. In contrast, women who are encouraged to invite their partners to counseling are less likely to change their stated ideal contraceptive method over time and are more likely to use their stated ideal method reported at the end of the counseling session. These women, however, are no more likely to report their method use at follow-up as their ideal contraceptive method of choice.

While both user-centered approaches seek to prioritize women's preferences and enable women to more effectively make informed choices in family planning, neither approach seems to offer strictly preferred outcomes for women. While short counseling marginally encourages women to change their contraceptive preferences over time, these preferences are not as likely to be realized. In contrast, joint counseling with partners provides women with the means to change their contraceptive behavior but may also crowd out women's personal preferences for contraception. By encouraging her partner to participate in counseling, a woman's stated preferences are likely to internalize her partner's preferences, and possibly at the expense of her own individual preferences. This might lead to either an increase in discordance between her stated ideal method at counseling and her own latent personal preferences for a method (if her contraceptive preferences are indeed discordant from her partner's) or it may even improve concordance and well-being if a woman had the same preferences as her partner.

Admittedly, limitations exist with our current study. While we have independently tested the effects of two user-centered counseling approaches on women's decision-making process and realization of preferences, the current sample size is too small to allow for a rigorous examination of interaction effects (which we present in Section K in the Appendix). The limitations to our inference are exacerbated by our resource constraints, which allowed us to provide women and couples with only one month's worth of transport and services at the clinic. Based on our prior work in Malawi, it is likely that one month is too short of a service period to allow women and couples to seek more complete care, particularly for women who recently received an injectable and might need to wait longer until they could switch methods. However, the fact that we are still able to observe adoption and switching behavior within this short period of time suggests that our intervention impacts would only accrue with a longer service period. Future iterations of this program would be well served by expanding the service period to at least a year, which would allow for the examination of longer-term outcomes related to contraceptive discontinuation, fertility, and reproductive well-being. Finally, while the way in which women realize their preferences in response to receiving a certain type of service is observable, it is not as straightforward to identify women's individual preferences, particularly in the presence of their husbands or other household members who can influence both their reported and realized choices. To this end, additional research is warranted to better understand women's own preferences that are expressed without their partner's participation. Taken together, our findings also call for a deeper investigation into the trade-offs that women face between 1) making independent decisions that better reflect their individual preferences and 2) incorporating their partner's preferences to make "jointly / socially better-off," but perhaps not necessarily "individually better off", decisions.

Our study design and research findings offer a number of insights that may be relevant for programs, policy, and practice. Since the 1994 ICDP Conference, demands for a shift towards a rights-based approach to reproductive health have emphasized that all people should have access to safe, effective, affordable, and acceptable methods of contraception of their choice (Blanc and Tsui, 2005; Cates and Maggwa, 2014; Starrs et al., 2018). These calls for action have also emphasized that while family planning programs should be situated within the broader global development agenda, they need to be implemented within a person-centered, rights-based approach in which individuals are able to make autonomous decisions about their own sexual and reproductive lives. Our study takes a step forward to operationalize this call by proposing and testing a suite of low-cost, implementable, and potentially scalable interventions that redistribute decision-making to women. To this end, evidence from this study will inform both the design of user-centered reproductive health programs that work to promote contraceptive autonomy and the broader discourse about how such programs may improve well-being.

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# Tables

Table 1: Summary Statistics

	All	Yes	No	Difference
A. Partner Invitation Group				
Age (years)	26.10	26.22	25.93	-0.30
Total no. of children at baseline (BL)	2.00	2.06	1.93	-0.13
Desired no. of children at BL	3.50	3.47	3.54	0.07
Education: None	0.01	0.01	0.01	-0.00
Education: Primary	0.65	0.64	0.65	0.01
Education: Secondary	0.32	0.32	0.32	-0.00
Education: Higher	0.02	0.02	0.02	-0.00
Currently working $(1 = yes)$	0.56	0.56	0.57	0.02
Age at first cohabitation (years)	18.04	18.06	18.02	-0.04
Current use of FP $(1 = yes)$	0.85	0.85	0.86	0.01
Current FP method: Injectables	0.51	0.49	0.54	0.05
Current FP method: Implants	0.35	0.37	0.31	-0.05
Top attribute: Effectiveness	0.53	0.53	0.53	0.00
Weight given to top attribute	16.54	16.61	16.44	-0.17
Wants to switch methods $(1 = yes)$	0.37	0.35	0.39	0.05
Husband supports FP $(1 = yes)$	0.91	0.90	0.91	0.00
Observations	782	450	332	782
B. Short, Tailored Counseling Group				
Age (years)	26.10	26.11	26.08	-0.03
Total no. of children at baseline (BL)	2.00	1.97	2.05	0.07
Desired no. of children at BL	3.50	3.49	3.50	0.01
Education: None	0.01	0.01	0.01	-0.00
Education: Primary	0.65	0.67	0.62	-0.04
Education: Secondary	0.32	0.30	0.35	0.05
Education: Higher	0.02	0.02	0.01	-0.01
Currently working $(1 = yes)$	0.56	0.57	0.56	-0.02
Age at first cohabitation (years)	18.04	18.05	18.03	-0.02
Current use of FP $(1 = yes)$	0.85	0.85	0.85	-0.00
Current FP method: Injectables	0.51	0.52	0.51	-0.02
Current FP method: Implants	0.35	0.34	0.35	0.01
Top attribute: Effectiveness	0.53	0.53	0.54	0.00
Weight given to top attribute	16.54	16.59	16.46	-0.13
Wants to switch methods $(1 = yes)$	0.37	0.38	0.34	-0.04
Husband supports FP $(1 = yes)$	0.91	0.90	0.91	0.02
Observations	782	451	331	782

Notes: Currently working refers to women's work status at the baseline. First cohabitation age is the age at which women started to live with her (first) husband. Current FP method: Injectables / Implants represents the proportion of women who were using injectables / Implants at baseline among all current users of contraception. Weight to top attribute refers to the number of counters (out of 20 counters) the woman assigned to their top method attribute. Intention to switch methods is woman's answer to the question: if you had the choice to switch to another method, would you like to switch? Husband support FP is defined from the question: on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods? This variable takes 1 if her husband was strongly supportive or supportive of contraceptive use, and 0 otherwise. \*\*\* 1%, \*\* 5%, \* 10%.

Table 2: Treatment Effect of the Short Tailored Counseling Intervention

	(1)	(2)	(3)	(4)		
A: Change in Stated Ideal Method from Counseling to Follow-up						
Short, Tailored Counseling	0.043	0.043	0.038	0.043		
	[0.040]	[0.040]	[0.040]	[0.040]		
N	635	635	635	634		
Control mean	0.42	0.42	0.42	0.42		
B: Change i	n Method	Use from	Counselin	g to Follow-up		
Short, Tailored Counseling	-0.003	-0.004	-0.003	-0.004		
	[0.031]	[0.030]	[0.030]	[0.031]		
N	638	638	638	637		
Control mean	0.18	0.18	0.18	0.18		
C: Discordance: Post-Co	unseling S	tated Idea	l Method	and Follow-up Method Use		
Short, Tailored Counseling	0.087**	0.083**	0.075**	0.067**		
	[0.040]	[0.039]	[0.039]	[0.039]		
N	638	638	638	637		
Control mean	0.43	0.43	0.43	0.43		
D: Discordance: S	Stated Idea	al Method	and Meth	od Use at Follow-up		
Short, Tailored Counseling	0.101***	0.098***	0.090**	0.093***		
	[0.040]	[0.039]	[0.039]	[0.039]		
N	635	635	635	634		
Control mean	0.52	0.52	0.52	0.52		
Balancing controls		X	X	X		
Area FE			X	X		
Other BL covariates				X		

Notes: In Panel A, the dependent variable is a binary variable that indicates whether a woman's stated ideal method at counseling differs from her stated ideal method at follow-up. In Panel B, the dependent variable is a binary variable that indicates if the woman's method use at counseling differs from her method use at follow-up. In Panel C, the dependent variable is a binary variable that indicates if the woman's stated ideal method at counseling differs from her method use at follow-up. In Panel D, the dependent variable is a binary variable that indicates if a woman's method use differs from her stated ideal method at follow-up. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), and ethnicity (1 = Chewa). Heteroskedastic-robust standard errors are presented in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

Table 3: Treatment Effect of the Partner Invitation Intervention

	(1)	(2)	(3)	(4)		
A: Chang	ge in Stat	ted Ideal	Method	from Counseling to Follow-up		
Partner Invitation	-0.073**	-0.073**	-0.071**	-0.069**		
	[0.040]	[0.040]	[0.040]	[0.041]		
N	635	635	635	634		
Control mean	0.49	0.49	0.49	0.49		
B: Change in Method Use from Counseling to Follow-up						
Partner Invitation	0.040*	0.037	0.035	0.035		
	[0.030]	[0.030]	[0.030]	[0.030]		
N	638	638	638	637		
Control mean	0.16	0.16	0.16	0.16		
C: Discordance: I	Post-Cou	nseling S	tated Ide	eal Method and Follow-up Method Use		
Partner Invitation	-0.086**	-0.093***	-0.084**	-0.087**		
	[0.040]	[0.039]	[0.039]	[0.039]		
N	638	638	638	637		
Control mean	0.53	0.53	0.53	0.53		
D: Discord	ance: St	ated Idea	al Method	d and Method Use at Follow-up		
Partner Invitation	-0.041	-0.046	-0.041	-0.042		
	[0.040]	[0.039]	[0.039]	[0.039]		
N	635	635	635	634		
Control mean	0.60	0.60	0.60	0.60		
Balancing controls		X	X	x		
Area FE			X	X		
Other BL covariates				X		

Notes: In Panel A, the dependent variable is a binary variable that indicates whether a woman's stated ideal method at counseling differs from her stated ideal method at follow-up. In Panel B, the dependent variable is a binary variable that indicates if the woman's method use at counseling differs from her method use at follow-up. In Panel C, the dependent variable is a binary variable that indicates if the woman's stated ideal method at counseling differs from her method use at follow-up. In Panel D, the dependent variable is a binary variable that indicates if a woman's method use differs from her stated ideal method at follow-up. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), and ethnicity (1 = Chewa). Heteroskedastic-robust standard errors are presented in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

Table 4: Treatment Effect of the Short Counseling Intervention, among Non-Users of Contraception

	A. Stated Ide	eal Method and Me	ethod Use	
	_	ed Ideal Method reen	Change in Method Use Between	,
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	
Short, Targeted Counseling	-0.086 [0.112]	0.063 [0.155]	-0.245** [0.105]	
N	62	62	62	
Control mean	0.39	0.48	0.48	
		B. Discordance		
		od Use at FUP ant with	Whether Method V is Discorda	0
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP
Short, Targeted Counseling	0.141	0.014	-0.069*	-0.047
	[0.136]	[0.104]	[0.052]	[0.039]
N	62	62	62	62
Control mean	0.70	0.87	0.96	1.00

Table 5: Treatment Effect of the Short Counseling Intervention, among Current Users of Contraception

	A. Stated Idea	l Method and Met	hod Use		
	Change to States Between		Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Short, Targeted Counseling	0.060**	0.036	-0.007	0.006	
	[0.033]	[0.042]	[0.026]	[0.018]	
N	575	572	575	575	
Control mean	0.15	0.42	0.11	0.04	
	В	. Discordance			
	Whether Metho is Discorda			Use at Counseling ant with	
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	
	after Counseling	at FUP	after Counseling	at FUP	
Short, Targeted Counseling	0.059*	0.095**	0.095**	0.084**	
	[0.041]	[0.042]	[0.041]	[0.042]	
N	575	572	575	572	
Control mean	0.40	0.48	0.36	0.49	

Table 6: Treatment Effect of the Partner Invitation Intervention, among Women whose Partners are Satisfied with their Baseline Method Use

A. Stated Ideal Method and Method Use						
	Change to State Between		Change in Method Use Between			
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	-0.086**	-0.118***	0.001	0.020	0.008	
	[0.037]	[0.047]	[0.012]	[0.026]	[0.020]	
N	468	466	468	468	468	
Control mean	0.24	0.52	0.02	0.07	0.04	
		B. Disc	ordance			
	Whether Method Use at FUP Whether Method Use at Counseling is Discordant with is Discordant with					
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method		
	after Counseling	at FUP	after Counseling	at FUP		
Partner Invitation	-0.093**	-0.071*	-0.147***	-0.087**		
	[0.046]	[0.047]	[0.046]	[0.047]		
N	468	466	468	466		
Control mean	0.47	0.57	0.48	0.58		

Table 7: Treatment Effect of the Partner Invitation Intervention, among Women whose Partners are Not Satisfied with their Baseline Method Use

	A.	Stated Ideal Meth	nod and Method U	se		
	Change to Stated Ideal Method Between		C	Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	0.207*	0.357***	0.029	0.022	0.055	
	[0.130]	[0.128]	[0.053]	[0.086]	[0.048]	
N	62	61	62	62	62	
Control mean	0.16	0.32	0.03	0.10	0.03	
		B. Disc	ordance			
	Whether Methor is Discorda			Use at Counseling ant with		
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP		
Partner Invitation	0.098	0.242*	0.228*	0.243*		
	[0.146]	[0.153]	[0.140]	[0.149]		
N	62	61	62	61		
Control mean	0.61	0.55	0.61	0.58		

#### **Figures**

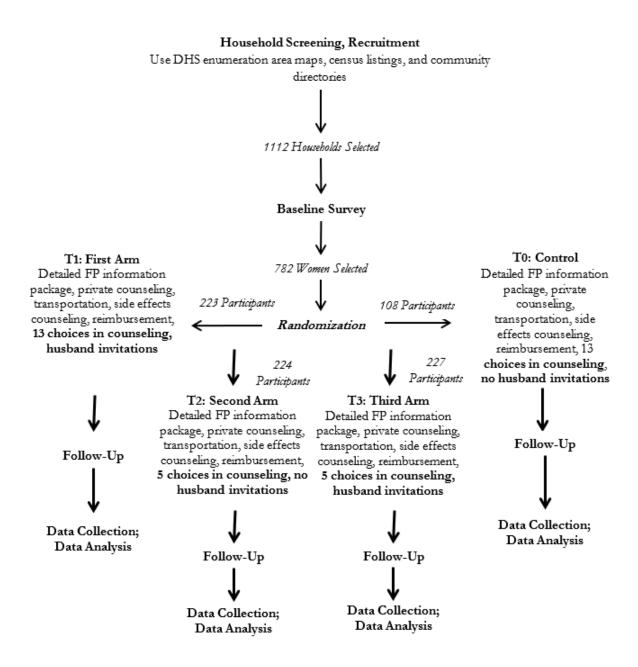


Figure 1: Experimental Design

### A Tables and Figures

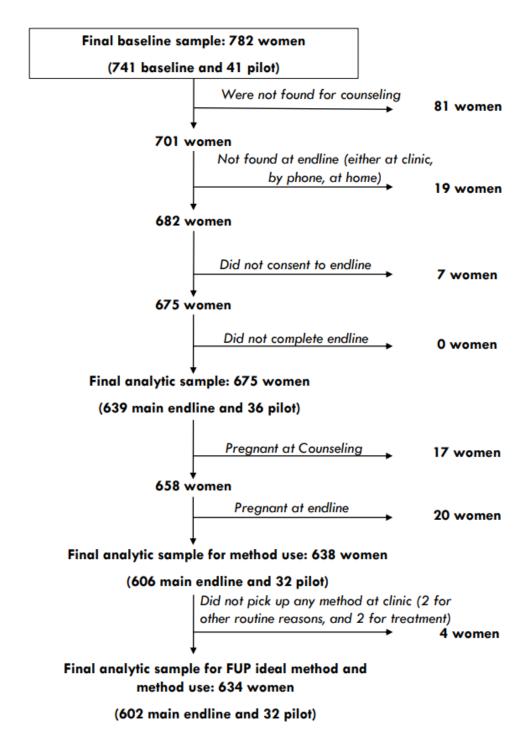


Figure A.1: Participant Flowchart - Analytic Sample

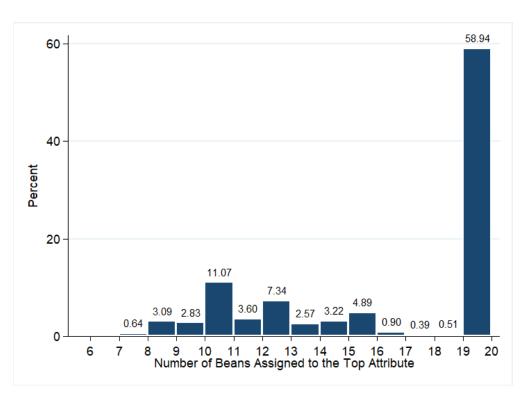


Figure A.2: Number of Counters Assigned to the Top Method Attribute

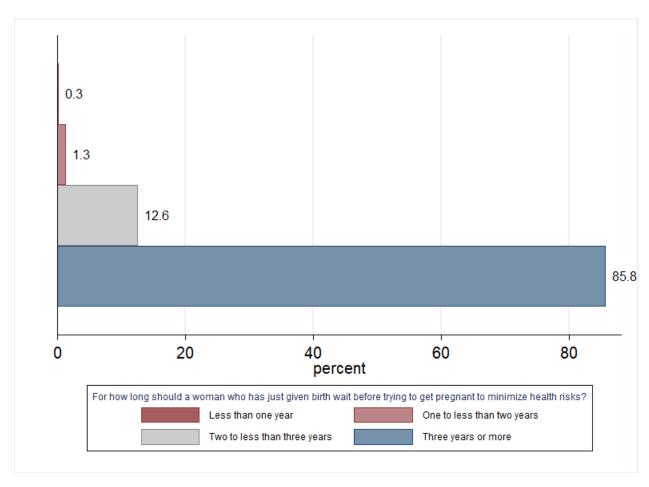


Figure A.3: Distribution of Women's Opinion of Birth Spacing

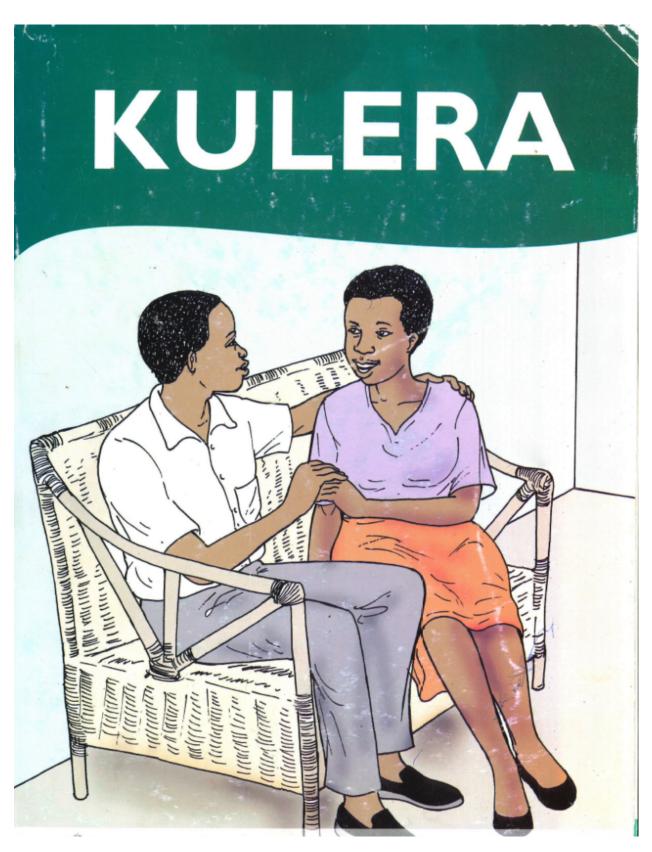


Figure A.4: Family Planning Flipchart

#### FLIP CHARTS - ATTRIBUTES AND METHODS

FLIP CHART COLOR	METHODS	ATTRIBUTES
	1. Sterilization	Effective at preventing pregnancy
	2. IUD	Duration of effect/lasts long
BLUE	3. Implants	Ü
	4. Injectables	
	5. Pill	
	1. LAM	No risk of harming health
	2. Two-day method	No effect on monthly bleeding
	3. Rhythm Method	No unpleasant side effects
PURPLE	4. Standard Days Method	Low-cost
	5. Condoms	No risk of infertility
		Non-hormonal
		No need to go to the clinic to obtain
	1. Condoms	Immediate return to fertility
	2. Two-day method	
PINK	3. Rhythm Method	
	4. Standard Days Method	
	5. IUD	
YELLOW	condoms	Protects against HIV/STI
	4 1170	Want to try something new / tired of old
	1. IUD	method
CDAV	2. Implants	My doctor recommended it to me
GRAY	3. Sterilization	My husband wanted me to use this method
	4. Pills	Other women in my family have used this method
	5. Injectables	Friends have used this method
	,	Easily available at clinic
	1. Sterilization	No need to remember to use
ORANGE	2. IUD	
	3. Implants	
	4. Injectables	

Figure A.5: Attribute-Method-Flipchart Mapping -  $1\,$ 

	1. Two-day method	No need to go to the clinic to resupply
	2. Rhythm Method	
WHITE	3. Standard Days Method	
WIIIIE	4. Stenlization	
	5. IUD	
	6. Implants	
	1. LAM	Concealable
	2. Two-day method	
RED	3. Rhythm Method	
	4. Standard Days Method	
	5. Injectables	
BLACK	1. Sterilization	Doesn't interfere with sex
	2. IUD	
	3. LAM 4. Implants	
	5. Injectables	
	6. Pills	
	1. IUD	CONTROL GROUP ONLY
	2. Implants	
	3. Stenlization	
	4. Pills	
GREEN	5. Injectables	
GIGEEN	7. Condoms	
	8. LAM	
	9. Two-day method	
	10. Rhythm	

Figure A.6: Attribute-Method-Flipchart Mapping -  $2\,$ 

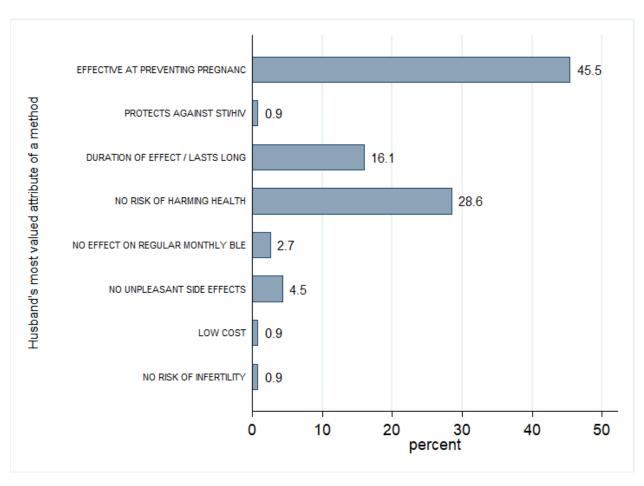


Figure A.7: Husband's Most Valued Attribute for Choosing a Method

Notes: 112 male partners answered this question.

# Table A.1: Descriptions of Variables

Variables	Variable Descriptions
Outcomes	
Change in Stated Ideal Method from Counseling to Follow-up	Binary: woman's ideal method differs from counseling to follow-up
Change in Method Use from Counseling to Follow-up	Binary: woman's method use at counseling differs from method use at follow-up
Discordance: Post-Counseling Ideal Method and Follow-up Method Use	Binary: woman's ideal method at counseling differs from method use at follow-up
Discordance: Stated Ideal Method and Method Use at Follow-up	Binary: woman's method use differs from ideal method at follow-up
Post-Counseling Ideal Method	At the end of each counseling session, women were asked: "If you could go to the clinic today, which contraceptive method would you use?" We use women's answers to this question to understand a woman's stated preferred method immediately following counseling  At the follow-up, women were asked, "Are you currently doing something or using any method to delay or avoid getting pregnant?" If they were currently on a method, counselors further probed
Follow-up Method Use	which method they were currently using from a list of 16 options: Female Sterilization, Male Sterilization, IUD, Injectables, Implants, Pill, Condom, Female Condom, Diaphragm / Foam / Jelly, Two Day Method, Standard Days Method, Lactational Amenorrhea Method, Rhythm Method, Withdrawal, Other Modern Method, and Other Traditional Method. Responses to this question were used to identify women's contraceptive method use at follow-up
Concordance: Post-Counseling Ideal Method and Follow-up Use	The dependent variable of concordance is defined as a binary variable taking 1 if a woman's post-counseling ideal method matches her reported method use at follow-up
Follow-up Ideal Method $ \label{eq:concordance}                                    $	In the phone-based survey and the home-based survey, women were asked, "if you could freely choose a family planning / contraceptive method to use, which method(s) would you like to choose?" We use women's answer to this question as their stated ideal method at the follow-up stage. For women who visited the clinic, women were asked their purpose of their clinic visits: starting a method, refilling / renewing a method, switching methods, or treatment of side effects of contraceptive methods. We consider the contraceptive method women started, renewed, or switched to as their stated ideal method at the clinic visit session. For the two women who came to the clinic only for counseling, we do not assign a stated ideal method For all method types, we examine the concordance between women's stated ideal method and method use at the follow-up session. This dependent variable takes on a value of 1 if their stated ideal method concords with their method use at the follow-up session; and 0 otherwise
Covariates	
Age	Age of woman, in years
Total no. of children at baseline (BL)	The woman's total number of children
Desired no. of children	The woman's desired number of children
Education: None	Binary: the highest educational attainment is none $(1 = yes)$
Education: Primary	Binary: the highest educational attainment is primary $(1 = yes)$
Education: Secondary	Binary: the highest education attainment is secondary $(1 = yes)$
Education: Higher	Binary: the highest educational attainment is higher $(1 = yes)$
Currently working	Binary: currently working, worked in last 7 days, or worked in the 12 months $(1 = yes)$
Age at first cohabitation	Age of woman when she first cohabited with her (first) husband, in years
Current use of FP	Binary: the woman was on a contraceptive method at BL (1=yes)
Current FP method: Injectables	Binary: the woman was using injectables at BL (1=yes)
Current FP method: Implants	Binary: the woman was using implants at BL (1=yes)
Top attribute: Effectiveness	Binary: woman's most valued method attribute is effectiveness at BL $(1 = yes)$
Weight given to top attribute:	Number of beans (out of 20) given to top attribute mentioned
Wants to switch methods	Binary: whether the woman intends to switch to another method at BL $(1 = yes)$
Husband supports FP	Binary: partner is strongly supportive or supportive of FP use at BL $(1 = yes)$

Table A.2: Distribution of Method Use and Stated Ideal Contraceptive Method at Baseline

	(1)	(2)	(3)
	Current Method	Woman Ideal	Husband Ideal
No method	0.13	0.02	0.03
Female Sterilization		0.12	0.02
Male Sterilzation			0.01
IUD	0.01	0.03	0.02
Injectables	0.45	0.31	0.35
Implants	0.30	0.43	0.46
Pill	0.07	0.05	0.03
Condom	0.02	0.01	0.04
Rhythm Method			0.01
Standard Days Method	0.01	0.02	
Withdrawal	0.02	0.00	0.04
Other Modern Method		0.00	0.01
Other Traditional Method	0.00	0.01	0.04
Observations	777	773	112

Notes: Column (1) presents the distribution of current method use among 777 women (679 current users and 98 non-users) at baseline. Column (2) presents the distribution of women's reported ideal method among 773 women (679 current users and 88 non-users who reported that they may adopt a method in the future + 6 non-users who will not pick up any method in the future) at baseline. Column (3) presents the distribution of male partner's reported ideal contraceptive method among the 112 husbands who were present at the counseling session.

Table A.3: Distribution of Top Attribute Desired by Women in a Contraceptive Method at Baseline

	(1)	(2)
Effective at preventing pregnancy	0.53	Blue
No unpleasant side effects	0.13	Purple
Duration of effect / lasts long	0.11	Blue
No risk of harming health	0.09	Purple
No effect on regular monthly bleeding	0.06	Purple
No need to remember using the method	0.03	Orange
Will be able to get pregnant when I want	0.01	Pink
Can be used for a long time without need to visit clinic or re-supply	0.01	White
No need to go to a clinic to obtain the method	0.01	Purple
Protects against STI/HIV	0.01	Yellow
No risk of infertility	0.01	Purple
Friends have used this method	0.00	Gray
Easily available at the clnic	0.00	Gray
Low cost	0.00	Purple
My doctor recommended it to me	0.00	Gray
Should not be hormonal	0.00	Purple
Does not interrupt sex	0.00	Black
Other women in my family have used this method	0.00	Gray
Can be used without anyone else knowing	0.00	Red
Other	0.01	Green
Observations	775	

Notes: The distribution presented in Column (1) is based on women's responses to the question: "In choosing a contraceptive method, what feature(s) would be most important to you?". Column (2) presents the colored flipchart that women who were assigned to the short counseling session received based on their reported top attribute.

Table A.4: Instrumental Variable (IV-2SLS) Regression Results of Partner Invitation Intervention

	(1)	(2)	(3)	(4)	
A: Change in Stated Ideal Method from Counseling to Follow-up					
Partner Invitation	-0.251**	-0.252**	-0.243**	-0.235**	
	[0.140]	[0.140]	[0.139]	[0.139]	
N	635	635	635	634	
Control mean	0.49	0.49	0.49	0.49	
First Stage F	•	147.54	146.74	145.32	
B: Change in Method Use from Counseling to Follow-up					
Partner Invitation	0.138*	0.128	0.120	0.120	
	[0.104]	[0.102]	[0.102]	[0.101]	
N	638	638	638	637	
Control mean	0.16	0.16	0.16	0.16	
First Stage F	150.39	149.22	148.64	147.12	
C: Discordance:	Post-Cou	nseling S	tated Ide	eal Method and Follow-up Method Us	
Partner Invitation	-0.295**	-0.319***	-0.288**	-0.294**	
	[0.138]	[0.136]	[0.134]	[0.133]	
N	638	638	638	637	
Control mean	0.53	0.53	0.53	0.53	
First Stage F	150.39	149.22	148.64	147.12	
D: Discord	lance: St	ated Idea	al Metho	d and Method Use at Follow-up	
Partner Invitation	-0.142	-0.160	-0.142	-0.144	
	[0.137]	[0.135]	[0.133]	[0.132]	
N	635	635	635	634	
Control mean	0.60	0.60	0.60	0.60	
First Stage F	•	147.54	146.74	145.32	
Balancing controls		X	X	x	
Area FE			X	X	
Other BL covariates	S			X	

Notes: In Panel A, the dependent variable is a binary variable that indicates whether a woman's stated ideal method at counseling differs from her ideal method at follow-up. In Panel B, the dependent variable is a binary variable that indicates if the woman's method use at counseling differs from her method use at follow-up. In Panel C, the dependent variable is a binary variable that indicates if the woman's stated ideal method at counseling differs from her method use at follow-up. In Panel D, the dependent variable is a binary variable that indicates if a woman's method use differs from her stated ideal method at follow-up. Balancing control variables include a woman's age, contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), and ethnicity (1 = Chewa). Heteroskedastic-robust standard errors are presented in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

Table A.5: Instrumental Variable (IV-2SLS) Regression Results of Partner Invitation Intervention, among Non-Users of Contraception

	A. Stated	l Ideal Method and	l Method Use		
	Change to Stated Ideal Method Between		Change in Method Use Between	,	
Partner Invitation	Pre-Counseling and Post-Counseling -0.053	Counseling and Follow-Up -0.058	Counseling and Follow-Up (Adoption) -0.518*		
N Control mean	[0.310] $62$ $0.22$	[0.485] 62 0.44	[0.379] 62 0.44		
	0.22	B. Discordance			
	Whether Meth is Discord	od Use at FUP ant with	Whether Method Use at Counseling is Discordant with		
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	
Partner Invitation	0.242 [0.380]	0.516** [0.305]	0.071 [0.163]	0.010 [0.243]	
N	62	62	62	62	
Control mean	0.74	0.81	0.96	0.96	

Table A.6: Instrumental Variable (IV-2SLS) Regression Results of Partner Invitation Intervention, among Current Users of Contraception

	A. Stated	Ideal Method and	Method Use		
	-	ed Ideal Method een	Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	-0.234**	-0.290**	0.105*	0.042	
	[0.116]	[0.146]	[0.081]	[0.064]	
N	575	572	575	575	
Control mean	0.24	0.50	0.08	0.05	
		B. Discordance			
	Whether Meth is Discord	od Use at FUP ant with	Whether Method Use at Counseling is Discordant with		
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	
	after Counseling	at FUP	after Counseling	at FUP	
Partner Invitation	-0.350***	-0.185*	-0.467***	-0.189*	
	[0.141]	[0.143]	[0.142]	[0.144]	
N	575	572	575	572	
Control mean	0.50	0.57	0.50	0.57	

Table A.7: Instrumental Variable (IV-2SLS) Regression Results of Partner Invitation Intervention, among Women whose Partners are Satisfied with their Baseline Method Use

	Α.	Stated Ideal Meti	nod and Method U	se	
	Change to State Between		Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)
Partner Invitation	-0.301**	-0.417***	0.003	0.071	0.030
	[0.131]	[0.169]	[0.042]	[0.088]	[0.069]
N	468	466	468	468	468
Control mean	0.24	0.52	0.02	0.07	0.04
		B. Discordance			
	Whether Methoris Discorda			Use at Counseling ant with	
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	
	after Counseling	at FUP	after Counseling	at FUP	
Partner Invitation	-0.324**	-0.250*	-0.514***	-0.309**	
	[0.160]	[0.166]	[0.163]	[0.166]	
N	468	466	468	466	
Control mean	0.47	0.57	0.48	0.58	

Table A.8: Instrumental Variable (IV-2SLS) Regression Results of Partner Invitation Intervention, among Women whose Partners are Not Satisfied with their Baseline Method Use

	A.	Stated Ideal Meth	nod and Method Us	se	
	Change to State Between		Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)
Partner Invitation	0.595*	1.010***	0.085	0.064	0.159
	[0.377]	[0.406]	[0.128]	[0.215]	[0.128]
N	62	61	62	62	62
Control mean	0.16	0.32	0.03	0.10	0.03
		B. Discordance			
	Whether Methor is Discorda			Use at Counseling ant with	
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	
Partner Invitation	0.281	0.683*	0.655**	0.687**	
	[0.368]	[0.435]	[0.371]	[0.416]	
N	62	61	62	61	
Control mean	0.61	0.55	0.61	0.58	

Table A.9: Treatment Effect of the Partner Invitation Intervention

	A. Stated	Ideal Method and	Method Use			
	-	ed Ideal Method een	-	Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)		
Partner Invitation	-0.051*	-0.069**	0.031*	0.013		
	[0.033]	[0.041]	[0.022]	[0.017]		
N	637	634	637	637		
Control mean	0.24	0.49	0.07	0.04		
		B. Discordance				
		Whether Method Use at FUP is Discordant with		Whether Method Use at Counseling is Discordant with		
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method		
	after Counseling	at FUP	after Counseling	at FUP		
Partner Invitation	-0.087**	-0.042	-0.122***	-0.048		
	[0.039]	[0.039]	[0.039]	[0.039]		
N	637	634	637	634		
Control mean	0.53	0.60	0.54	0.61		

Table A.10: Treatment Effect of the Short Counseling Intervention

	A. Stated Idea	l Method and Met	hod Use		
	Change to State Between		O	Change in Method Use Between	
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Short, Targeted Counseling	0.042*	0.043	-0.010	0.005	
	[0.032]	[0.040]	[0.024]	[0.017]	
N	637	634	637	637	
Control mean	0.17	0.42	0.10	0.04	
	В	. Discordance			
	Whether Methor is Discorda			Use at Counseling ant with	
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	
Short, Targeted Counseling	0.067**	0.093***	0.093***	0.080**	
	[0.039]	[0.039]	[0.039]	[0.039]	
N	637	634	637	634	
Control mean	0.43	0.52	0.41	0.53	

Table A.11: Treatment Effect of the Partner Invitation Intervention, among Non-Users of Contraception

	A. Stated	l Ideal Method and	l Method Use		
	Change to Stated Ideal Method Between		Change in Method Use Between	)	
Partner Invitation	Pre-Counseling and Post-Counseling -0.015	Counseling and Follow-Up -0.016	Counseling and Follow-Up (Adoption) -0.147		
N	[0.104] 62	[0.162] $62$	[0.127] 62		
Control mean	0.22	0.44	0.44		
		B. Discordance	)		
	Whether Meth is Discord	od Use at FUP ant with	Whether Method Use at Counseling is Discordant with		
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	
Partner Invitation	0.069	0.147*	0.020	0.003	
N	[0.129] 62	$[0.095] \\ 62$	[0.054] 62	[0.081] 62	
Control mean	0.74	0.81	0.96	0.96	

Table A.12: Treatment Effect of the Partner Invitation Intervention, among Current Users of Contraception

	A. Stated	Ideal Method and	Method Use		
	-	ed Ideal Method een	-	Change in Method Use Between	
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	-0.069**	-0.085**	0.031	0.013	
	[0.035]	[0.043]	[0.025]	[0.019]	
N	575	572	575	575	
Control mean	0.24	0.50	0.08	0.05	
		B. Discordance			
		od Use at FUP ant with	Whether Method Use at Counseling is Discordant with		
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	
	after Counseling	at FUP	after Counseling	at FUP	
Partner Invitation	-0.104***	-0.054	-0.138***	-0.056*	
	[0.042]	[0.043]	[0.041]	[0.043]	
N	575	572	575	572	
Control mean	0.50	0.57	0.50	0.57	

### B Study Setting

We conduct our field experiment in urban Lilongwe, the capital of Malawi. Estimates from the 2015-16 Malawi Demographic and Health Survey (MDHS) show that contraceptive prevalence in Malawi was 59.2 percent among married women of reproductive age (ages 15-49). The distribution of contraceptive methods has not changed significantly over time: injectable contraceptives (30 percent), intra-uterine devices (IUDs) (11.5 percent), and female sterilization (10.9 percent) have remained the most popular methods among married women (National Statistical Office (NSO) and ICF Macro, 2017). While contraceptive prevalence has increased over the past decade, unmet need for family planning<sup>10</sup> has remained high. More than 37 percent of women in 2016 reported that they discontinued their method within the last 12 months, among whom half reported discontinuing their method for non-fertility related reasons (e.g. side effects, lack of spousal support). This high rate of discontinuation suggests that barriers exist to a woman's decision-making process for choosing the "right" method that caters to her preferences. 11 While family planning programs have mainly focused on increasing contraceptive uptake (the extensive margin), few studies have focused on whether the increase in use implies that contraceptive preferences are, in fact, being met (the intensive margin).

## C Women's Actual Fertility and Desired Fertility

We document women's fertility experiences and preferences to better identify factors that may contribute to their contraceptive use. We find that 83.1 percent of women in our sample

<sup>&</sup>lt;sup>10</sup>Women with an unmet need for family planning are those who either want to limit births or delay childbearing for at least two years, but who are not using any method of contraception (Potts, 2000; Westoff and Ochoa, 1991).

<sup>&</sup>lt;sup>11</sup>Even as an increasing number of family planning programs have been successful in increasing contraceptive uptake, it is important to note that a woman's family planning preferences are not realized simply from an increased use of contraceptive methods alone - this has been reiterated by reproductive rights researchers, policymakers, and advocates alike (Senderowicz, 2020).

have not yet realized their ideal fertility. This is likely given that women in our sample are relatively young (between 18 and 35 years old) and may still have the opportunity to bear children in the future. Figure C.1 depicts women's actual births and desired births. When asked how long a woman who has just given birth should wait before trying to get pregnant again, 85.8 percent of respondents answered three years or more, and around 98 percent believed that waiting for at least two years before the next birth could help to minimize any health risks (Figure A.3). These results suggest that even though a significant proportion of women in our sample had not reached their desired fertility and were likely to try to conceive in the future, their need for family planning may still be high, particularly for spacing and timing future births.

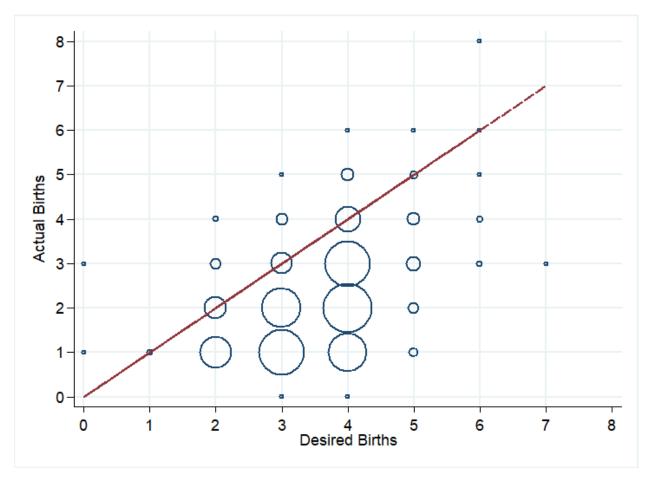


Figure C.1: Plot of Women's Realized and Desired Fertility

#### D Counseling Times

The average counseling time for all women who received the counseling alone is 15.9 minutes (excluding women whose male partner also participated in the study). The counseling time for women who were assigned to short, targeted counseling (T2 and T3) is 1.3 minutes shorter compared to women who were assigned to standard counseling (T0 and T1) (15.3 minutes versus 16.6 minutes, respectively)(Figure D.1).

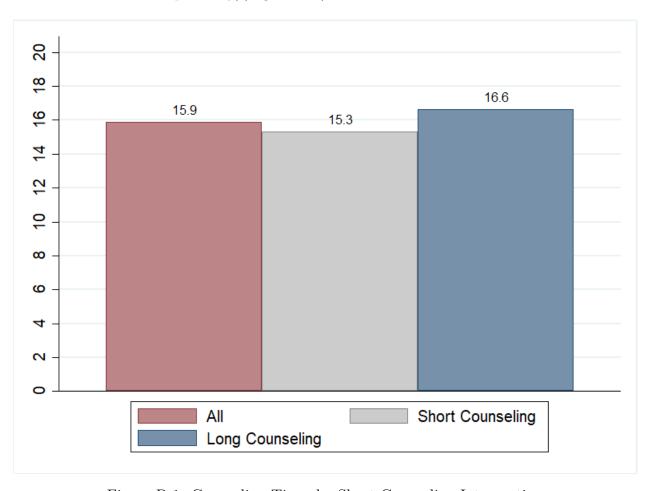


Figure D.1: Counseling Time, by Short Counseling Intervention

We compare counseling times between the individual counseling (T0 and T2) and husband / partner invitation (T1 and T3) counseling groups. The average counseling time for women who were assigned to the husband invitation arms is 1.8 minutes longer than the average counseling time for women who were not assigned to the husband / partner invitation arms.

The average counseling time for the entire sample is 16.6 minutes<sup>12</sup> for all respondents (Figure D.2).

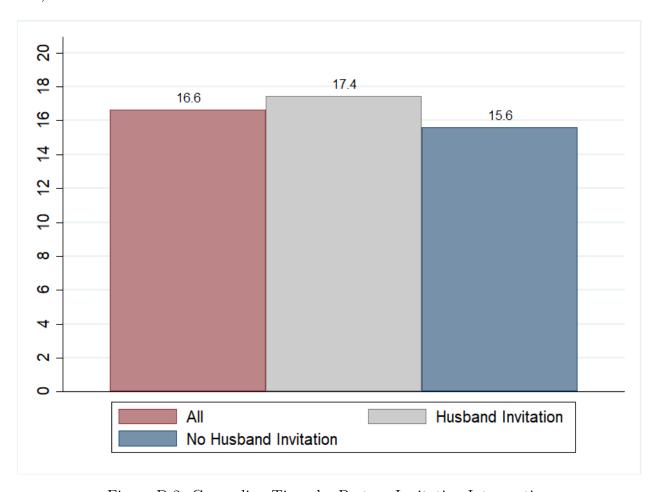


Figure D.2: Counseling Time, by Partner Invitation Intervention

### E Switching Preferences to the Ideal Method

At baseline, counseling, and follow-up, women were asked to state their ideal contraceptive method<sup>13</sup> and confirm their choice if they were found to have switched their choice of stated

<sup>&</sup>lt;sup>12</sup>The average counseling time for the entire sample differs from that in the previous short counseling analysis, because here we include all women who were counseled. In the previous comparison, we only focus on women who were counselled alone and exclude those whose husband joined the counseling session.

<sup>&</sup>lt;sup>13</sup>At all stages of the study, women's stated ideal contraceptive method was elicited using the following question: "If you could freely choose a contraceptive / family planning method, which method(s) would you like to use?"

ideal method since the previous interview. Table E.1 presents the proportion of women who reported changes to their stated ideal contraceptive method or method use over the various phases of the study. From Panel A, more than half of surveyed respondents (55.9 percent) changed their stated ideal contraceptive method between baseline and follow-up, a duration of 4.6 months. An estimated 46.2 percent of women reportedly changed their stated ideal contraceptive method between the baseline and post-counseling stages (an average of 73 days), while 41.5 percent of women changed their stated ideal method in the period following counseling and prior to the follow-up session (an average of 65 days). Over the course of the counseling session (between pre- and post-counseling surveys), 17.1 percent of women changed their reported stated ideal method.

When asked about intentions to switch methods, a consistently large proportion of women expressed an interest in switching from their current contraceptive method if given the choice and means. At baseline, 36.7 percent of users said that they would like to switch to another method if given the chance; this proportion rose to 42.2 percent at the time of counseling, and fell slightly to 34.2 percent at follow-up (Panel B of Table E.1).

While women's stated ideal method was changing over time, these changes to their stated preferences may not, in fact, have resulted in subsequent changes to their contraceptive behavior. Around 19.0 percent of women switched to a different contraceptive method (either adoption of a new method, switching to a different method, or discontinuing altogether) between baseline and counseling, prior to the rollout of the intervention and approximately 17.6 percent of women were found to have switched methods between counseling and follow-up (Panel C of Table E.1).

In summary, women's preferences for contraceptive methods seem to be malleable over time. Moreover, changes in women's stated preferences do not necessarily align with their actual switching behavior over time. This discordance suggests that barriers to women's realization of their method preferences continue to exist.

Table E.1: Changes to Stated Ideal Contraceptive Method and Method Use over Time

A. Cl	nanges to Stated Ide	al Contraceptive Me	ethod
	Baseline	Pre-Counseling	Post-Counseling
Baseline	X	X	X
Pre-Counseling	$44.75\% \ (311/695)$	X	X
Post-Counseling	$46.19\% \ (321/695)$	$17.12\% \ (120/701)$	X
Follow-up Sessions	$55.88\% \ (399/714)$	$44.79\% \ (301/672)$	$41.52\% \ (279/672)$
В.	Intention to Switch	Contraceptive Meth	od
	Baseline	Counseling	Follow-up
Intention to Switch Methods	36.67% (249/679)	42.15% (255/605)	34.22% (194/567)
(	C. Changes to Contra	aceptive Method Use	е
	Baseline	Counseling	Follow-up
Baseline	X	X	X
Counseling	18.97% (129/680)	X	X
Follow-up Sessions	23.86% (162/679)	17.58% (112/637)	X

#### F Selection

#### Availability for Counseling

Out of the 782 women who participated in the study, 701 women were reached for the counseling intervention, while 81 women were not available to participate in counseling<sup>14</sup>. To understand if women who attrited from the sample were systematically different from those who remained within the sample at the counseling stage, we compare these two groups of women in Table F.1.

Women who were reached for counseling were less interested in changing methods at

 $<sup>^{14}</sup>$ Of the 81 uncounseled women, 61 women had moved, 2 women had died due to reasons that were unrelated to our study, 6 women refused to participate, and the remaining 12 women were contacted but were unavailable to participate.

baseline if given the choice compared to women who were not reached for counseling by 17 p.p. (mean: 0.37). These differences suggest that the impacts of our two user-centered interventions on preferences and change in method use would likely be larger if the interventions were to be rolled out to a more generalizable population of women and couples.

#### Which type of woman invited her husband?

Among women who were randomly assigned to the partner invitation group, those who were willing and encouraged their partners to participate in the counseling session tended to be similar across a number of characteristics relative to those women who were also offered the invitation but who did not invite their husbands to counseling. Table F.2 presents comparisons of characteristics between women who invited their partners (compliers) and women who were offered the invitation but who did not invite their partners (non-compliers). Our results show that while most of the differences between these groups are not significant at conventional levels, compliers were slightly younger than non-compliers when they first cohabitated with their husband / partner, and non-compliers were marginally more likely to be users of injectables at the baseline.

#### Who visited the Good Health Kauma Clinic?

Of the 701 women who were available for the counseling session and received the counseling intervention, a total of 67 women visited the Good Health Kauma Clinic and received at least one family planning service (e.g. started a method, refilled a method, switched to another method, received treatment for side effects, among others) by endline. In comparing women who visited the Kauma Clinic and those women who were offered the opportunity to visit the Kauma Clinic but did not go, women who visited the clinic were 13 p.p. (mean: 0.85) more likely to be using a contraceptive method at baseline, 16 p.p. more likely to be on injectables at baseline, and 23 p.p. less likely to be using implants than women who did not go to the Kauma Clinic (Table F.3, panel 1). For women who did not visit the Good Health Kauma Clinic over the service period, some visited other clinics and health

Table F.1: Who were Available for the Counseling Session?

	All	Counselled	Not Counselled	Difference
Age (years)	26.12	26.21	25.20	-1.01
Total no. of children at baseline (BL)	2.01	2.02	1.90	-0.12
Desired no. of children at BL	3.50	3.50	3.50	0.00
Education: None	0.01	0.01	0.01	0.00
Education: Primary	0.65	0.65	0.67	0.02
Education: Secondary	0.32	0.32	0.30	-0.02
Education: Higher	0.02	0.02	0.01	-0.00
Currently working $(1 = yes)$	0.57	0.57	0.49	-0.08
Age at first cohabitation (years)	18.05	18.06	18.05	-0.01
Current use of FP $(1 = yes)$	0.85	0.85	0.85	0.00
Current FP method: Injectables	0.51	0.51	0.57	0.07
Current FP method: Implants	0.35	0.35	0.30	-0.06
Top attribute: Effectiveness	0.53	0.53	0.57	0.04
Weight given to top attribute	16.54	16.46	17.40	0.94
Wants to switch methods $(1 = yes)$	0.37	0.35	0.52	0.17**
Husband supports FP $(1 = yes)$	0.90	0.91	0.82	-0.09*
Using a Long-Acting Method at BL $(1 = yes)$	0.75	0.75	0.77	0.01
Husband Satisfied with Woman's Current Method $(1 = yes)$	0.87	0.86	0.88	0.01
Observations	770	701	69	770

Notes: During the counseling session, 770 women who were interviewed at the baseline were asked if they were available for counseling, among whom 701 women were available for counseling and 69 women did not receive the counseling session. The variable currently working refers to women's work status at the baseline. First cohabitation age is the age at which women started to live with her (first) husband. Current FP method: Injectables / Implants represents the proportion of women who were using injectables / Implants at baseline among all current users of contraception. Weight to top attribute refers to the number of counters (out of 20 counters) the woman assigned to their top method attribute. Intention to switch methods is woman's answer to the question: if you had the choice to switch to another method, would you like to switch? Husband support FP is defined from the question: on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods? This variable takes 1 if her husband was strongly supportive or supportive of contraceptive use, and 0 otherwise. Using a Long-Acting Methods takes 1 if the woman was using IUDs/implants/injectables at the baseline. \*\*\* 1%, \*\* 5%, \* 10%.

Table F.2: Husband Group Compliers

	All CompliersNon-CompliersDifference				
Age (years)	26.29	25.64	26.54	0.90	
Total no. of children at baseline (BL)	2.08	2.00	2.11	0.11	
Desired no. of children at BL	3.47	3.48	3.46	-0.02	
Education: None	0.01	0.01	0.01	0.00	
Education: Primary	0.65	0.70	0.63	-0.06	
Education: Secondary	0.32	0.29	0.33	0.05	
Education: Higher	0.02	0.01	0.02	0.01	
Currently working $(1 = yes)$	0.57	0.56	0.57	0.00	
Age at first cohabitation (years)	18.03	17.56	18.21	0.65*	
Current use of FP $(1 = yes)$	0.85	0.88	0.84	-0.03	
Current FP method: Injectables	0.49	0.40	0.52	0.11	
Current FP method: Implants	0.38	0.44	0.35	-0.09	
Top attribute: Effectiveness	0.52	0.48	0.53	0.05	
Weight given to top attribute	16.52	16.15	16.66	0.51	
Wants to switch methods $(1 = yes)$	0.32	0.32	0.32	-0.00	
Husband supports FP $(1 = yes)$	0.91	0.89	0.92	0.02	
Using a Long-Acting Method at BL $(1 = ye)$	(s) 0.76	0.77	0.75	-0.02	
Husband Satisfied with Woman's Current Method $(1 = yes)$	0.87	0.85	0.88	0.03	
Observations	401	112	289	401	

Notes: Among 701 women who received a counseling session, 401 women were assigned to the partner invitation group, among which 112 male partners participated. Currently working refers to women's work status at the baseline. First cohabitation age is the age at which women started to live with her (first) husband. Current FP method: Injectables / Implants represents the proportion of women who were using injectables / Implants at baseline among all current users of contraception. Weight to top attribute refers to the number of counters (out of 20 counters) the woman assigned to their top method attribute. Intention to switch methods is woman's answer to the question: if you had the choice to switch to another method, would you like to switch? Husband support FP is defined from the question: on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods? This variable takes 1 if her husband was strongly supportive or supportive of contraceptive use, and 0 otherwise. The variable Using a Long-Acting method at BL takes 1 if the woman was on injectables/implants/IUDs at the baseline. The variable husband satisfied with woman's current contraceptive method is constructed using a question from baseline that how satisfied women's male partner was with their current mthod. This variable takes 1 if her husband is very satisfied or somewhat satisfied with her current method use at baseline. \*\*\* 1%, \*\* 5%, \* 10%.

providers to receive family planning. We compare women who reported having visited any clinic (including Kauma) in the past month with those who did not visit any clinic (Table F.3, panel 2), and find similar results to those found in the first Panel.

#### Differential Attrition by Intervention Arm

Figure A.1 presents the final analytical sample for analyses. Out of the initial sample of 782 women, 107 women attrited from the sample. Among them, 81 women were not reached for counseling, and 26 women did not consent to participate in the follow-up survey.

Among the 107 women who attrited from the initial sample, we compare their baseline covariates to determine whether these variables differ across the intervention arms. From Table F.4, women who attrited from the partner invitation sample were marginally less likely to be using injectables at baseline compared to those women who were not assigned to the partner invitation group and who were also lost to follow-up. However, we do not find significant differences along any other observable covariates between attritors from the partner invitation arms and those from the non-partner invitation arms.

When comparing attritors across short, tailored counseling intervention arms, attritors from the short, tailored counseling were marginally more likely to attain primary school, marginally less likely to attain secondary school, and were marginally less likely to have a supportive husband / partner. In general, and in a similar fashion to the partner invitation attrition analysis, we do not observe strong evidence of differential attrition across intervention arms.

Finally, we conduct a comparison of attritors to the analytic sample of non-attritors who were followed up at baseline to infer any potential observable characteristics that might be correlated with attrition (Table F.5). In general, attritors and non-attritors are similar across a number of characteristics, with attritors being slightly younger than non-attritors.

Table F.3: Who Visited the Clinic?

	All	Yes	No	Difference
Visited the Good Health Kauma Clinic?				
Age (years)	26.21	25.69	26.27	0.58
Total no. of children at baseline (BL)	2.02	2.10	2.01	-0.09
Desired no. of children at BL	3.50	3.49	3.50	0.01
Education: None	0.01	0.03	0.01	-0.02
Education: Primary	0.65	0.61	0.65	0.04
Education: Secondary	0.32	0.34	0.32	-0.02
Education: Higher	0.02	0.01	0.02	0.00
Currently working $(1 = yes)$	0.57	0.61	0.57	-0.04
Age at first cohabitation (years)	18.06	17.44	18.12	0.68*
Current use of FP $(1 = yes)$	0.85	0.97	0.84	-0.13**
Current FP method: Injectables	0.51	0.65	0.49	-0.16*
Current FP method: Implants	0.35	0.15	0.38	0.23***
Top attribute: Effectiveness	0.53	0.58	0.52	-0.06
Weight given to top attribute	16.46	16.18	16.49	0.31
Wants to switch methods $(1 = yes)$	0.35	0.39	0.34	-0.05
Husband supports FP $(1 = yes)$	0.91	0.91	0.91	0.00
Using a Long-Acting Method at BL $(1 = yes)$	0.75	0.79	0.75	-0.04
Husband Satisfied with Woman's	0.75	0.79	0.75	-0.04
Current Method $(1 = yes)$	0.86	0.84	0.87	0.02
Observations	701	67	634	701
	701	- 01	004	101
Visited Any Clinic?				
Age (years)	26.25	26.03	26.33	0.30
Total no. of children at baseline (BL)	2.03	2.10	2.00	-0.10
Desired no. of children at BL	3.49	3.49	3.49	-0.00
Education: None	0.01	0.01	0.01	0.00
Education: Primary	0.64	0.63	0.65	0.02
Education: Secondary	0.33	0.34	0.32	-0.01
Education: Higher	0.02	0.03	0.01	-0.01
Currently working $(1 = yes)$	0.57	0.54	0.59	0.04
Age at first cohabitation (years)	18.06	17.86	18.14	0.28
Current use of FP $(1 = yes)$	0.86	0.91	0.83	-0.08**
Current FP method: Injectables	0.50	0.72	0.41	-0.31***
Current FP method: Implants	0.35	0.11	0.46	0.35***
Top attribute: Effectiveness	0.53	0.59	0.51	-0.08
Weight given to top attribute	16.45	17.00	16.24	-0.76*
Wants to switch methods $(1 = yes)$	0.35	0.44	0.31	-0.13**
Husband supports FP $(1 = yes)$	0.92	0.91	0.92	0.00
Using a Long-Acting Method at BL $(1 = ves)$	0.76	0.78	0.75	-0.03
Husband Satisfied with Woman's				
Current Method $(1 = yes)$	0.86	0.82	0.88	0.05
Observations	682	187	495	682

Notes: Among the 782 women who were interviewed at the baseline, 701 women attended a counseling session, among whom 682 women received a follow-up interview either through phone surveys, home visit surveys, or clinic visit surveys. Currently working refers to women's work status at the baseline. First cohabitation age is the age at which women started to live with her (first) husband. Current FP method: Injectables / Implants represents the proportion of women who were using injectables / Implants at baseline among all current users of contraception. Weight to top attribute refers to the number of counters (out of 20 counters) the woman assigned to their top method attribute. Intention to switch methods is woman's answer to the question: if you had the choice to switch to another method, would you like to switch? Husband support FP is defined from the question: on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods? This variable takes 1 if her husband was strongly supportive or supportive of contraceptive use, and 0 otherwise. Using a Long-Acting Methods takes 1 if the woman was using IUDs/implants/injectables at the baseline.

\*\*\* 1%, \*\* 5%, \* 10%.

Table F.4: Summary Statistics of Attritors by Intervention Arms

	All	Yes	No	Difference
A. Partner Invitation Group				
Age (years)	25.05	25.53	24.43	-1.11
Total no. of children at baseline (BL)	1.83	1.88	1.77	-0.12
Desired no. of children at BL	3.52	3.48	3.58	0.10
Education: None	0.01	0.02	0.00	-0.02
Education: Primary	0.67	0.60	0.77	0.17
Education: Secondary	0.30	0.37	0.21	-0.15
Education: Higher	0.02	0.02	0.02	0.00
Currently working $(1 = yes)$	0.52	0.50	0.55	0.05
Age at first cohabitation (years)	18.07	18.42	17.61	-0.81
Current use of FP $(1 = yes)$	0.83	0.83	0.83	-0.00
Current FP method: Injectables	0.58	0.47	0.72	0.25*
Current FP method: Implants	0.29	0.33	0.23	-0.10
Top attribute: Effectiveness	0.53	0.60	0.43	-0.17
Weight given to top attribute	17.04	17.14	16.91	-0.22
Wants to switch methods $(1 = yes)$	0.46	0.47	0.44	-0.03
Husband supports FP $(1 = yes)$	0.84	0.86	0.82	-0.04
Observations	107	60	47	107
B. Short, Tailored Counseling Group				
Age (years)	25.05	24.75	25.49	0.74
Total no. of children at baseline (BL)	1.83	1.75	1.95	0.20
Desired no. of children at BL	3.52	3.60	3.41	-0.18
Education: None	0.01	0.02	0.00	-0.02
Education: Primary	0.67	0.75	0.56	-0.19*
Education: Secondary	0.30	0.22	0.42	0.20*
Education: Higher	0.02	0.02	0.02	0.01
Currently working $(1 = yes)$	0.52	0.55	0.49	-0.06
Age at first cohabitation (years)	18.07	18.02	18.15	0.13
Current use of FP $(1 = yes)$	0.83	0.83	0.83	0.00
Current FP method: Injectables	0.58	0.62	0.51	-0.10
Current FP method: Implants	0.29	0.27	0.31	0.04
Top attribute: Effectiveness	0.53	0.56	0.49	-0.07
Weight given to top attribute	17.04	17.25	16.71	-0.55
Wants to switch methods $(1 = yes)$	0.46	0.44	0.49	0.05
Husband supports FP $(1 = yes)$	0.84	0.77	0.95	0.18*
Observations	107	64	43	107

Notes: Among 782 women who were interviewed at the baseline, 107 women attrited from the sample either at counseling or at the follow-up (through phone surveys, home surveys, or clinic visit surveys). Currently working refers to women's work status at the baseline. First cohabitation age is the age at which women started to live with her (first) husband. Current FP method: Injectables / Implants represents the proportion of women who were using injectables / Implants at baseline among all current users of contraception. Weight to top attribute refers to the number of counters (out of 20 counters) the woman assigned to their top method attribute. Intention to switch methods is woman's answer to the question: if you had the choice to switch to another method, would you like to switch? Husband support FP is defined from the question: on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods? This variable takes 1 if her husband was strongly supportive or supportive of contraceptive use, and 0 otherwise. \*\*\* 1%, \*\* 5%, \* 10%.

Table F.5: Summary Statistics between Attritors and Non-Attritors

	(1)	(2)	(3)	(4)
	All Women	Non-Attritors	Attritors	Difference
. ,				
Age (years)	26.10	26.27	25.05	1.22**
Total no. of children at baseline (BL)	2.00	2.03	1.83	0.20
Desired no. of children at BL	3.50	3.49	3.52	-0.03
Education: None	0.01	0.01	0.01	0.00
Education: Primary	0.65	0.64	0.67	-0.03
Education: Secondary	0.32	0.33	0.30	0.03
Education: Higher	0.02	0.02	0.02	-0.00
Currently working $(1 = yes)$	0.56	0.57	0.52	0.05
Age at first cohabitation (years)	18.04	18.04	18.07	-0.03
Current use of FP $(1 = yes)$	0.85	0.86	0.83	0.03
Current FP method: Injectables	0.51	0.50	0.58	-0.07
Current FP method: Implants	0.35	0.35	0.29	0.07
Top attribute: Effectiveness	0.53	0.53	0.53	0.00
Weight given to top attribute	16.54	16.46	17.04	-0.58
Wants to switch methods $(1 = yes)$	0.37	0.35	0.46	-0.10
Husband supports FP $(1 = yes)$	0.91	0.92	0.84	0.07*
Observations	782	675	107	782

Notes: Among 782 women who were interviewed at the baseline, 107 women attrited from the sample either at counseling or at the follow-up (through phone surveys, home surveys, or clinic visit surveys). Currently working refers to women's work status at the baseline. First cohabitation age is the age at which women started to live with her (first) husband. Current FP method: Injectables / Implants represents the proportion of women who were using injectables / Implants at baseline among all current users of contraception. Weight to top attribute refers to the number of counters (out of 20 counters) the woman assigned to their top method attribute. Intention to switch methods is woman's answer to the question: if you had the choice to switch to another method, would you like to switch? Husband support FP is defined from the question: on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods? This variable takes 1 if her husband was strongly supportive or supportive of contraceptive use, and 0 otherwise. Column (1) shows the summary statistics for all 782 women, column (2) for the 675 non-attritors in the final sample, column (3) for the 107 attritors from baseline during subsequent stages, and column (4) displays the difference between column (2) and column (3). \*\*\* 1%, \*\* 5%, \* 10%.

Table F.6: Partner Invitation

	All	Partner Invitation	Partner Invitation Compliers	Partner Presence
Age (years)	26.29	26.40	25.83	25.76
Total no. of children at baseline (BL)	2.05	2.11	2.04	2.07
Desired no. of children at BL	3.48	3.45	3.47	3.42
Education: None	0.01	0.01	0.01	0.01
Education: Primary	0.63	0.64	0.70	0.68
Education: Secondary	0.33	0.33	0.28	0.30
Education: Higher	0.02	0.02	0.01	0.01
Currently working (1=yes)	0.58	0.57	0.57	0.55
Age at first cohabitation (years)	18.06	18.04	17.54	17.54
Current use of FP (1=yes)	0.87	0.87	0.89	0.89
Current FP method: Injectables	0.50	0.49	0.40	0.42
Current FP method: Implants	0.36	0.38	0.44	0.44
Top attribute: Effectiveness	0.53	0.52	0.49	0.52
Weight given to top attribute	16.42	16.47	16.20	16.05
Wants to switch methods $(1 = yes)$	0.35	0.32	0.32	0.32
Husband supports FP $(1 = yes)$	0.92	0.91	0.88	0.89
Using a Long-Acting Method at BL (1=yes)	0.78	0.78	0.77	0.79
Husband Satisfied with Woman's Current Method (1=yes)	0.86	0.87	0.85	0.88
Adoption of Methods	0.04	0.04	0.04	0.04
Switching of Methods	0.09	0.11	0.18	0.15
Discontinuation of Methods	0.05	0.05	0.03	0.02
Observations	638	368	107	106

Notes: During the counseling session, 770 women who were interviewed at the baseline were asked if they were available for counseling, among whom 701 women were available for counseling and 69 women did not receive the counseling session. The variable currently working refers to women's work status at the baseline. First cohabitation age is the age at which women started to live with her (first) husband. Current FP method: Injectables / Implants represents the proportion of women who were using injectables / Implants at baseline among all current users of contraception. Weight to top attribute refers to the number of counters (out of 20 counters) the woman assigned to their top method attribute. Intention to switch methods is woman's answer to the question: if you had the choice to switch to another method, would you like to switch? Husband support FP is defined from the question: on a scale of 1 to 5, with 1 being strongly supportive and 5 being strongly opposed, how do you believe your husband feels towards using family planning methods? This variable takes 1 if her husband was strongly supportive or supportive of contraceptive use, and 0 otherwise. Using a Long-Acting Methods takes 1 if the woman was using IUDs/implants/injectables at the baseline. \*\*\* 1%, \*\* 5%, \* 10%.

#### G Robustness Checks

In Table 2 and Table 3, which present our main results for the two interventions, the dependent variables in Panel A and Panel D are constructed using women's "stated ideal method at follow-up." For women who were followed up by phone or through home visits, their follow-up stated ideal method is defined using their responses to the question, "If you could freely choose a contraceptive / family planning method, which method(s) would you like to use?" However, for the 67 women who visited the clinic during the one-month service period, this question was not directly asked but was instead inferred. Specifically, we define these women's follow-up stated ideal method to be the contraceptive method they started, refilled, or switched to by the end of their clinic visit. This is based on the consideration that 65 of 67 women who started, renewed, or switched to a method during their clinic visit reported that they had obtained the services and the methods they wanted during the exit interview. We do not assign a follow-up stated ideal method for the remaining two women who went to the clinic for ancillary services related to their current method (e.g. treatment of side effects), but not to actually switch methods or discontinue their method.

To check whether our results are driven by the women who visited the clinic, we restrict our analysis to the subsample of women who were either reached by phone or through home visits. Table G.1 and Table G.2 present the results from these analyses, and the estimates are largely in line with our main findings from Table 2 and Table 3.

Table G.1: Robustness Check: Treatment Effect of Short Tailored Counseling, Excluding Clinic Visits

	(1)	(2)	(3)	(4)			
A: Change in Stated Ideal Method from Counseling to Follow-up							
Short, Tailored Counseling	0.044	0.045	0.040	0.043			
	[0.041]	[0.042]	[0.042]	[0.042]			
N	592	592	592	591			
Control mean	0.43	0.43	0.43	0.43			
B: Change i	in Method	d Use from	n Counsel	ling to Follow-up			
Short, Tailored Counseling	-0.003	-0.004	-0.003	-0.004			
	[0.031]	[0.030]	[0.030]	[0.031]			
N	638	638	638	637			
Control mean	0.18	0.18	0.18	0.18			
C: Discordance: Post-Co	ounseling	Stated Id	eal Metho	od and Follow-up Method Use			
Short, Tailored Counseling	0.087**	0.083**	0.075**	0.067**			
	[0.040]	[0.039]	[0.039]	[0.039]			
N	638	638	638	637			
Control mean	0.43	0.43	0.43	0.43			
D: Discordance: S	Stated Ide	eal Metho	d and Me	ethod Use at Follow-up			
Short, Tailored Counseling	0.082**	0.080**	0.070**	0.074**			
	[0.041]	[0.040]	[0.040]	[0.040]			
N	592	592	592	591			
Control mean	0.56	0.56	0.56	0.56			
Balancing controls		X	X	X			
Area FE			X	X			
Other BL covariates				X			

Notes: The analysis is restricted to women who were reached by phone or through home visits at the follow-up. In Panel A, the dependent variable is a binary variable that indicates whether a woman's stated ideal method at counseling differs from her stated ideal method at follow-up. In Panel B, the dependent variable is a binary variable that indicates if the woman's method use at counseling differs from her method use at follow-up. In Panel C, the dependent variable is a binary variable that indicates if the woman's stated ideal method at counseling differs from her method use at follow-up. In Panel D, the dependent variable is a binary variable that indicates if a woman's method use differs from her stated ideal method at follow-up. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), and ethnicity (1 = Chewa). Heteroskedastic-robust standard errors are presented in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

Table G.2: Robustness Check: Treatment Effect of Partner Invitation, Excluding Clinic Visits

	(1)	(2)	(3)	(4)				
A: Chang	ge in Sta	ted Ideal	Method	from Counseling to Follow-up				
Partner Invitation	-0.075**	-0.076**	-0.079**	-0.079**				
	[0.041]	[0.041]	[0.042]	[0.042]				
N	592	592	592	591				
Control mean	0.50	0.50	0.50	0.50				
В: С	B: Change in Method Use from Counseling to Follow-up							
Partner Invitation	0.040*	0.037	0.035	0.035				
	[0.030]	[0.030]	[0.030]	[0.030]				
N	638	638	638	637				
Control mean	0.16	0.16	0.16	0.16				
C: Discordance: I	Post-Cou	nseling S	tated Ide	eal Method and Follow-up Method Use				
Partner Invitation	-0.086**	-0.093***	-0.084**	-0.087**				
	[0.040]	[0.039]	[0.039]	[0.039]				
N	638	638	638	637				
Control mean	0.53	0.53	0.53	0.53				
D: Discord	lance: St	ated Idea	al Metho	d and Method Use at Follow-up				
Partner Invitation	-0.023	-0.029	-0.026	-0.025				
	[0.040]	[0.040]	[0.040]	[0.040]				
N	592	592	592	591				
Control mean	0.62	0.62	0.62	0.62				
Balancing controls		X	X	x				
Area FE			X	X				
Other BL covariates	3			X				

Notes: The analysis is restricted to women who were reached by phone or through home visits at the follow-up. In Panel A, the dependent variable is a binary variable that indicates whether a woman's stated ideal method at counseling differs from her stated ideal method at follow-up. In Panel B, the dependent variable is a binary variable that indicates if the woman's method use at counseling differs from her method use at follow-up. In Panel C, the dependent variable is a binary variable that indicates if the woman's stated ideal method at counseling differs from her method use at follow-up. In Panel D, the dependent variable is a binary variable that indicates if a woman's method use differs from her stated ideal method at follow-up. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), and ethnicity (1 = Chewa). Heteroskedastic-robust standard errors are presented in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

# H Results by Women's Satisfaction with her Contraceptive Method Use at Baseline

For women who were satisfied with their method use at baseline, the partner invitation intervention significantly reduces their likelihood of changing their stated ideal method following counseling but has no observable effect on their method use over time (including adoption, switching, and discontinuation altogether). As a result of receiving the partner invitation intervention, these women who were satisfied with their baseline method use were strongly less likely to be discordant between their stated ideal method and method use at follow-up, plausibly because of women's ex ante satisfaction with their method use.

For women who were not satisfied with their method use at baseline, the partner invitation significantly increases their likelihood of changing their stated ideal method from pre-counseling to post-counseling by 22.3 p.p. (control mean: 0.14), and by 26.9 p.p. from counseling to follow-up (control mean: 0.31). However, the partner invitation intervention has no effect on these women's method use over time. As can be seen from Panel B of Table H.2, these women who were not satisfied with their method use at baseline and who received the partner invitation intervention were strongly more likely to be discordant between their stated ideal method and method use at follow-up.

For women who were satisfied with their method use at baseline, the short, tailored counseling intervention significantly increases their likelihood of changing their stated ideal method following counseling but has no observable effect on their method use. Therefore, women who were satisfied with their baseline method use and who received the short, tailored counseling intervention were more likely to be discordant between their stated ideal method and method use at follow-up.

In contrast, among women who were not satisfied with their method use at baseline, the short, targeted counseling intervention significantly reduces their likelihood of changing their stated ideal method and increases their likelihood of adopting a new method; these women

Table H.1: Treatment Effect of the Partner Invitation Intervention, among Women who are Satisfied with their Baseline Method Use

	A.	Stated Ideal Meth	nod and Method Us	se		
	Change to State Between		Change in Method Use Between			
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	-0.063**	-0.094**	0.004	0.026	0.014	
	[0.037]	[0.046]	[0.012]	[0.024]	[0.020]	
N	496	493	496	496	496	
Control mean	0.24	0.51	0.01	0.06	0.04	
		B. Disc	ordance			
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP		
Partner Invitation	-0.112***	-0.068*	-0.160***	-0.085**		
	[0.045]	[0.046]	[0.044]	[0.046]		
N	496	493	496	493		
Control mean	0.49	0.57	0.49	0.58		

Table H.2: Treatment Effect of the Partner Invitation Intervention, among Women who are Not Satisfied with their Baseline Method Use

	Α.	Stated Ideal Met	hod and Method U	se			
	Change to State Between		С	Change in Method Use Between			
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)		
Partner Invitation	0.223**	0.269**	0.035	0.025	0.019		
	[0.115]	[0.136]	[0.066]	[0.101]	[0.035]		
N	59	59	59	59	59		
Control mean	0.14	0.31	0.03	0.14	0.03		
		B. Disc	ordance				
	Whether Methor is Discorda			Use at Counseling ant with			
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP			
Partner Invitation	0.300**	0.413***	0.399***	0.378***			
	[0.140]	[0.134]	[0.132]	[0.129]			
N	59	59	59	59			

0.48

0.55

0.48

Control mean

0.45

Table H.3: Treatment effect of the Short Counseling Intervention, among Women who are Satisfied with their Baseline Method Use

	A. Star	ted Ideal Method	and Method Use			
	Change to State Between		Cl	Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Short, Targeted Counseling	0.071**	0.103**	0.006	-0.008	0.000	
	[0.035]	[0.045]	[0.013]	[0.023]	[0.020]	
N	496	493	496	496	496	
Control mean	0.15	0.39	0.02	0.07	0.04	
		B. Discorda	ance			
	Whether Methor is Discorda		Whether Method is Discord	Use at Counseling ant with		
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method		
	after Counseling	at FUP	after Counseling	at FUP		
Short, Targeted Counseling	0.073*	0.104**	0.093**	0.087**		
	[0.045]	[0.045]	[0.044]	[0.045]		
N	496	493	496	493		
Control mean	0.37	0.47	0.33	0.48		

Table H.4: Treatment effect of the Short Counseling Intervention, among Women who are Not Satisfied with their Baseline Method Use

	A. Stat	ted Ideal Method	and Method Use			
	Change to Stated Between		C	Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Short, Targeted Counseling	-0.065	-0.447***	0.089*	-0.132	0.033	
	[0.123]	[0.139]	[0.056]	[0.110]	[0.049]	
N	59	59	59	59	59	
Control mean	0.23	0.64	0.00	0.23	0.00	
		B. Discorda	nce			
	Whether Metho is Discorda			Use at Counseling ant with		
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method		
	after Counseling	at FUP	after Counseling	at FUP		
Short, Targeted Counseling	-0.104	-0.121	-0.061	0.023		
	[0.155]	[0.160]	[0.155]	[0.150]		
N	59	59	59	59		
Control mean	0.55	0.68	0.64	0.68		

are no more likely to be discordant between their stated ideal method and method use at follow-up relative to women who did not receive tailored counseling.

### I Results by Women's Intentions to Switch Contraceptive Methods

In this section, we stratify women by their stated intentions to switch contraceptive methods at baseline.

For women who expressed a stated intention to switch methods at baseline, we do not observe any significant effect of the partner invitation intervention on changes to their stated ideal method, changes in their method use, or level of discordance between their stated ideal method and method use. In contrast, for women who did not have an intention to switch

Table I.1: Treatment Effect of the Partner Invitation Intervention, among Women who had an Intention to Switch Method Use at Baseline

	Α.	Stated Ideal Meth	nod and Method Us	se		
	Change to State Between		Change in Method Use Between			
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	0.077	-0.038	0.022	0.067*	0.030	
	[0.064]	[0.073]	[0.020]	[0.049]	[0.036]	
N	196	195	196	196	196	
Control mean	0.23	0.45	0.01	0.09	0.05	
		B. Disc	ordance			
	Whether Methoris Discorda		Whether Method is Discord			
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP		
Partner Invitation	-0.069	0.050	-0.073	0.037		
	[0.073]	[0.072]	[0.074]	[0.069]		
N	196	195	196	195		
Control mean	0.65	0.62	0.62	0.66		

methods at baseline, the partner invitation intervention significantly reduces their likelihood of changing their stated ideal method but has no observable effect on their method use (including adoption, switching, and discontinuation altogether). These women, as a result, were less likely to be discordant, plausibly because of their *ex ante* satisfaction with their method use, and hence their lack of intention to switch to another method.

For women who had an intention to switch methods at baseline, the short, targeted counseling intervention reduces their likelihood of changing their stated ideal method from counseling to follow-up but does not have an observable effect on their method use over time. As can be seen from Panel B of Table I.3, these women who had an intention to switch methods and who received a short, targeted counseling session were more likely to be discordant at follow-up. In contrast, for women who did not want to switch methods,

Table I.2: Treatment Effect of the Partner Invitation Intervention, among Women who did not Want to Switch Method Use at Baseline

	A.	Stated Ideal Meth	nod and Method U	se		
	Change to State Between		Change in Method Use Between			
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	-0.095**	-0.104**	-0.006	0.006	0.006	
	[0.042]	[0.054]	[0.015]	[0.026]	[0.021]	
N	371	369	371	371	371	
Control mean	0.23	0.53	0.02	0.06	0.03	
		B. Disco	ordance			
	Whether Methor is Discorda			Use at Counseling ant with		
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP		
Partner Invitation	-0.067*	-0.060	-0.126***	-0.076*		
	[0.052]	[0.054]	[0.051]	[0.054]		
N	371	369	371	369		
Control mean	0.39	0.53	0.41	0.52		

Table I.3: Treatment Effect of the Short Counseling Intervention, among Women who had an Intention to Switch Method Use at Baseline

	A. Star	ted Ideal Method	and Method Use		
	Change to State Between		Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)
Short, Targeted Counseling	0.050	-0.155**	0.025	-0.056	-0.010
	[0.063]	[0.074]	[0.025]	[0.049]	[0.037]
N	196	195	196	196	196
Control mean	0.22	0.52	0.01	0.16	0.07
		B. Discorda	nce		
	Whether Metho	d Use at FUP	Whether Method	Use at Counseling	
	is Discorda	nt with	is Discorda	ant with	
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	
	after Counseling	at FUP	after Counseling	at FUP	
Short, Targeted Counseling	0.126**	0.093	0.156**	0.092*	
	[0.074]	[0.073]	[0.073]	[0.069]	
N	196	195	196	195	
Control mean	0.53	0.59	0.49	0.63	

the tailored counseling intervention increases their likelihood of changing their stated ideal method over time but has no observable effect on their method use. From Panel B of Table I.4, these women who did not want to switch methods at baseline and who received a short, targeted counseling session were slightly more likely to be discordant between their stated ideal method and method use at follow-up.

Table I.4: Treatment Effect of the Short Counseling Intervention, among Women who did not Want to Switch Method Use at Baseline

	A. Star	ted Ideal Method	and Method Use			
	Change to State Between		Change in Method Use Between			
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Short, Targeted Counseling	0.083**	0.141***	0.007	-0.013	0.020	
	[0.039]	[0.053]	[0.015]	[0.027]	[0.019]	
N	371	369	371	371	371	
Control mean	0.12	0.38	0.02	0.07	0.02	
		B. Discorda	ance			
	Whether Methor is Discorda		Whether Method is Discorda	9		
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP		
Short, Targeted Counseling	0.013	0.083*	0.038	0.065		
	[0.051]	[0.053]	[0.051]	[0.052]		
N	371	369	371	369		
Control mean	0.32	0.44	0.30	0.44		

### J Results by Method Type

To further explore the underlying channels through which our interventions shaped women's method preferences and behavior, we conduct a disaggregated analysis of intervention impact by method. For each method, we examine the following five outcomes: 1) post-counseling stated ideal method, 2) follow-up method use, 3) concordance between post-counseling stated ideal method and follow-up method use, 4) follow-up stated ideal method, and 5) concordance between their stated ideal method and method use at follow-up<sup>15</sup>.

We examine the impact of the partner invitation intervention on outcomes for each of the following methods: implants, injectables, pills, and other traditional methods (Rhythm / Withdrawal / Traditional), respectively. Results in Table J.1 show that women who were using a contraceptive method that were more generally preferred by male partners (i.e. implants) were more likely to be concordant between their stated ideal method and method use at the follow-up. Furthermore, these women were more likely to consider this method as an ideal method at endline. In contrast, for women who were using a contraceptive method that were less favored by male partners (e.g. pills, other traditional methods), they were more likely to exhibit discordance between their stated ideal method and method use at follow-up. Furthermore, these women were significantly less likely to consider pills and other traditional methods as an ideal method at the endline. Details from the method-specific analyses are presented below.

#### Implants

Results in Panel A of Table J.1 find no evidence of a significant impact of partner invitations on women's reported ideal method being implants following counseling. Moreover, we do not find any significant impact of partner invitations on women's use of implants at follow-up (Table J.1, Panel B), even though partners are most likely to cite implants as their most

 $<sup>^{15}\</sup>mathrm{Details}$  on how these variables were constructed are presented in Table A.1.

preferred contraceptive method (Table A.2).

Interestingly, the partner invitation intervention leads to a significantly higher level of concordance among women for implants. The first column of Panel C indicates that while partner invitations do not increase women's likelihood of reporting implants as their ideal method after counseling, the invitations increase uptake of implants by 8.9 p.p. (control mean: 0.17) at follow-up among women who reported implants as ideal immediately following counseling. This finding suggests that women who were encouraged to invite their partner to counseling were more likely to act on their stated preferences if their post-counseling ideal method was implants, which were also the most preferred method by male partners generally. To this end, it is likely that a woman's partner's preferences played a crucial role in shaping her eventually revealed preferences and behavior.

Findings from Panel D of Table J.1 also suggest that women who received a partner invitation were 7.5 p.p. (control mean: 0.32) more likely to report implants as their ideal method. A further examination of concordance at follow-up in Panel E suggests that among women who were using implants at the follow-up, receiving a partner invitation increases their likelihood of reporting implants as their ideal method at follow-up by 6.6 p.p. (control mean: 0.12), suggesting that women's stated preference for contraception are changing to more effectively align with their partners' preferences.

#### Injectables

We find similar, but smaller, results for injectables as we do for implants, which are the second most frequently preferred contraceptive method by male partners in our sample (Table A.2). We present our results in Column (2) of Table J.1. Our results in Panel A show that women who were assigned to the partner invitation arm were slightly more likely (4.5 p.p., control mean: 0.34) to report injectables as their ideal contraceptive method right after counseling. However, there is no significant impact of the partner invitation intervention on women's injectable use at follow-up (Panel B). Among women who were using injectables at follow-up,

those assigned to the partner invitation arm were slightly, but not significantly, more likely to have reported injectables as their ideal method (3.7 p.p., control mean: 0.22). Panel D of Table J.1 further shows that women who were assigned to the partner invitation arm were also slightly more likely to report injectables as ideal at follow-up (2.7 p.p., control mean: 0.32). Finally, Panel E finds that among women who were using injectables at follow-up, those who were invited to bring their partners to counseling were 3.5 p.p. more likely to report injectables as ideal at the same stage (control mean: 0.19).

Taken together, our findings on injectables serves as additional evidence that the invitation to bring male partners to counseling plays a role in shaping women's perceptions about contraceptive methods that they were already using. With this said, we do note that the impact of partner invitations on women's injectable preferences and use are not as significant nor as salient as what we find for implants, which are the most preferred contraceptive method by male partners.

#### **Pills**

We find opposite results for pill use and preferences to those obtained for implants. We present our results in Column (3) of Table J.1. In Panels A and B of Table J.1, we find no indication of any significant impact of partner invitations on women's stated ideal method being pills following counseling, and we find a slightly negative impact of partner invitations on women's use of pills at follow-up (2.6 p.p., control mean: 0.09). However, Panel C indicates that among women who reported pills as ideal at counseling, those who were assigned to the partner invitation arm were 3.1 p.p. less likely to be using pills at the follow-up (control mean: 0.05).

In Panel D, women who were assigned to the partner invitation arm were 3.7 p.p. less likely to report pills as their ideal method at follow-up (control mean: 0.09). Furthermore, Panel E shows that among women who were using pills at follow-up, those who were encouraged to invite their partner were 3.7 p.p. less likely to report pills as their ideal method

at follow-up (control mean: 0.06). These findings, if combined with our previous findings on partner preferences in Table A.2, suggests that women's preferences and subsequent behavior are also shaped by their partners' reported aversion to pills relative to implants and injectables. To this end, we observe evidence of substitution away from pills, both in terms of women's stated preferences and actual use, and towards implants and injectables, both of which are more aligned towards their partners' preferences for methods.

#### Rhythm Methods / Withdrawal / Other Traditional Methods

Among our sample of 112 husbands, 6 percent of husbands reported their stated ideal method to be a traditional method, including the rhythm method (1 percent), withdrawal (4 percent), or other traditional methods (1 percent). Given the rather low levels of support among husbands for these three traditional methods, we expect to observe a smaller, dampening effect of the partner invitation on women's preferences for and use of these methods. Results in Column (4) of Table J.1 confirm our predictions. There is no impact of the partner invitation intervention on women's stated preferences for these methods following counseling or on women's use of these methods at follow-up. Among women who were using these methods at the follow-up, partner invitations reduce women's likelihood of reporting them as their ideal contraceptive methods by 0.01 p.p.(control mean: 0.01, Panel E). To this end, we find a significantly higher discordance between women's preferences and method use at follow-up for women who were invited to bring their partners with them to counseling and who continued to use traditional methods of contraception.

Our disaggregated results by method type reveal that encouraging women to invite their partners to counseling compels women to report methods that their partners are more likely to prefer (in our case, partner preferences for implants and, to a lesser degree, injectables). To this end, women who were encouraged to invite their partner were more likely to be concordant between their stated ideal method and actual method use. In contrast, partner invitations to counseling are likely to inhibit women's reported preferences and use of meth-

Table J.1: Treatment Effects of the Partner Invitation Intervention by Method Type

	Implants	Injectables	Pills	Rhythm/Withdrawal/Traditional			
A. Post-Counseling Stated Ideal Method: Method Above							
Partner Invitation	0.030	0.050**	-0.021	0.007			
	[0.033]	[0.030]	[0.017]	[0.011]			
N	637	637	637	637			
Control mean	0.41	0.34	0.06	0.01			
	B. Fol	low-up Metl	nod: Metho	od Above			
Partner Invitation	0.038	0.001	-0.026	-0.015			
	[0.034]	[0.038]	[0.022]	[0.012]			
N	637	637	637	637			
Control mean	0.30	0.43	0.09	0.03			
C. FUP meth	nod = Post	-Counseling	Stated Ide	al Method: Method Above			
Partner Invitation	0.089***	0.037	-0.031**	-0.001			
	[0.029]	[0.030]	[0.015]	[0.006]			
N	637	637	637	637			
Control mean	0.17	0.22	0.05	0.01			
D	. Follow-up	Stated Idea	al Method:	Method Above			
Partner Invitation	0.065**	0.044	-0.045**	-0.008*			
	[0.037]	[0.036]	[0.021]	[0.006]			
N	634	634	634	634			
Control mean	0.33	0.31	0.09	0.01			
E. FUP	Method =	FUP State	d Ideal Me	thod: Method Above			
Partner Invitation	0.065***	0.035	-0.037***	-0.010**			
	[0.027]	[0.031]	[0.016]	[0.006]			
N	634	634	634	634			
Control mean	0.12	0.19	0.06	0.01			

Notes: The dependent variable in Panel A indicates whether a woman's stated ideal method at the post-counseling stage is the method specified above. The dependent variable in Panel B indicates whether her method use at the follow-up is the method specified above. The dependent variable in Panel C takes 1 if both the post-counseling stated ideal method and the follow-up method use are the method specified above. The dependent variable in Panel D takes 1 if the follow-up stated ideal method is the method specified above. The dependent variable in Panel E takes 1 if both her stated ideal method and her method use at follow-up are the method specified above. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), ethnicity (1 = Chewa), and pre-counseling method being injectables, pills, or condoms (1 = yes). Area fixed effects are included in all specifications. Heteroskedasticity-robust standard errors are in brackets.

\*\*\* 1%, \*\* 5%, \* 10%.

ods that are not aligned with their partner's stated preferences (in our case, preferences for pills). For women who were using pills, being encouraged to invite their partners to counseling may reduce their likelihood of reporting pills as their ideal contraceptive method, and

hence less likely to be concordant between their ideal method following counseling and their realized method use at follow-up.

Consistent with our findings for partners' preferences for contraceptive methods in Table A.2, men prefer implants and injectables to other methods, so their presence during counseling, or even perhaps their potential involvement in contraceptive decision-making outside of counseling, may compel women to change their preferences, and stated preferences in particular, to more closely resemble their partners' own preferences, potentially at the risk of crowding out women's own individual preferences for methods.

By the same token, we investigate the impact of the short, tailored counseling intervention on the same outcomes (Table J.2). We find short counseling to be particularly significant for shaping women's preferences around injectables, the most commonly used method in Malawi. In particular, women who received a short, tailored counseling session did not differ in their likelihood of choosing injectables as their stated ideal method after counseling, or the likelihood that they were using injectables at the follow-up. However, as can be seen from the third panel of Table J.2, among women who chose injectables as their stated ideal method at the post-counseling session, short, tailored counseling reduced their likelihood of using the method at follow-up by 6.2 p.p. (control mean: 0.29). Women who received a short, tailored counseling session were marginally, but not significantly, less likely to choose injectables as their stated ideal method at the follow-up session. Among women who were using injectables at follow-up, tailored counseling reduced their likelihood of considering the method as their stated ideal method by 10.1 p.p. at follow-up (control mean: 0.27).

Table J.2: Treatment Effects of Short, Tailored Counseling by Method Type

	Implants	Injectables	Pills	Rhythm/Withdrawal/Traditional			
A. Post-Counseling Stated Ideal Method: Method Above							
Short, Targeted Counseling	-0.028	-0.013	-0.020	0.004			
	[0.032]	[0.029]	[0.018]	[0.010]			
N	637	637	637	637			
Control mean	0.44	0.39	0.06	0.01			
I	3. Follow-u	p Method:	Method	Above			
Short, Targeted Counseling	0.004	-0.043	0.005	-0.000			
	[0.033]	[0.038]	[0.021]	[0.011]			
N	637	637	637	637			
Control mean	0.32	0.47	0.07	0.02			
	b/se	b/se	b/se	b/se			
C. FUP Method =	Post-Cou	nseling State	ed Ideal	Method: Method Above			
Short, Targeted Counseling	-0.020	-0.062**	-0.001	-0.002			
	[0.030]	[0.029]	[0.014]	[0.007]			
N	637	637	637	637			
Control mean	0.24	0.29	0.03	0.01			
D. Follo	ow-up Stat	ed Ideal Me	thod: M	ethod Above			
Short, Targeted Counseling	-0.017	-0.047*	-0.002	0.005			
	[0.037]	[0.035]	[0.020]	[0.005]			
N	634	634	634	634			
Control mean	0.38	0.37	0.06	0.00			
	b/se	b/se	b/se	b/se			
E. FUP Metl	nod = FUI	Stated Ide	al Metho	od: Method Above			
Short, Targeted Counseling	-0.031	-0.101***	0.016	0.008**			
	[0.028]	[0.031]	[0.014]	[0.004]			
N	634	634	634	634			
Control mean	0.18	0.27	0.02	0.00			

Notes: The dependent variable in Panel A indicates whether a woman's stated ideal method at the post-counseling stage is the method specified above. The dependent variable in Panel B indicates whether her method use at the follow-up is the method specified above. The dependent variable in Panel C takes 1 if both the post-counseling stated ideal method and the follow-up method use are the method specified above. The dependent variable in Panel D takes 1 if the follow-up stated ideal method is the method specified above. The dependent variable in Panel E takes 1 if both her stated ideal method and her method use at follow-up are the method specified above. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), ethnicity (1 = Chewa), and pre-couseling method being injectables, pills, or condoms (1 = yes). Area fixed effects are included in all specifications. Heteroskedasticity-robust standard deviations are in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

Table K.1: Interaction Effects of Short Tailored Counseling and Partner Invitation Interventions

	(1)	(2)	(3)	(4)
A: Change in Stated Ideal Method	from Co	unseling	to Follow-	up
Short, Tailored Counseling	0.019	0.019	0.015	0.025
,	[0.065]	[0.065]	[0.065]	[0.066]
Partner Invitation	-0.081	-0.082	-0.079	-0.072
	[0.064]	[0.064]	[0.065]	[0.065]
Short, Tailored Counseling × Partner Invitation	0.022	0.024	0.021	0.014
· ·	[0.083]	[0.083]	[0.084]	[0.084]
N	635	635	635	634
Dep. mean	0.45	0.45	0.45	0.45
B: Change in Method Use from	n Counse	eling to Fo	ollow-up	
Short, Tailored Counseling	-0.031	-0.039	-0.038	-0.044
,	[0.048]	[0.047]	[0.047]	[0.048]
Partner Invitation	0.006	-0.002	-0.004	-0.009
	[0.049]	[0.048]	[0.048]	[0.048]
Short, Tailored Counseling × Partner Invitation	0.057	0.066	0.066	0.075
	[0.063]	[0.062]	[0.063]	[0.063]
N	638	638	638	637
Dep. mean	0.18	0.18	0.18	0.18
C: Discordance: Post-Counseling Stated Ide	eal Metho	od and Fo	ollow-up N	Method Us
Short, Tailored Counseling	0.064	0.051	0.041	0.030
· ·	[0.064]	[0.064]	[0.064]	[0.064]
Partner Invitation	-0.086*	-0.101*	-0.097*	-0.104*
	[0.064]	[0.063]	[0.063]	[0.063]
Short, Tailored Counseling × Partner Invitation	0.020	0.032	0.038	0.042
	[0.083]	[0.081]	[0.082]	[0.082]
N	638	638	638	637
Dep. mean	0.48	0.48	0.48	0.48
D: Discordance: Stated Ideal Method	d and Mo	ethod Use	e at Follov	v-up
Short, Tailored Counseling	0.065	0.054	0.055	0.061
	[0.064]	[0.063]	[0.063]	[0.063]
Partner Invitation	-0.058	-0.071	-0.059	-0.057
	[0.065]	[0.064]	[0.064]	[0.063]
Short, Tailored Counseling $\times$ Partner Invitation	0.053	0.065	0.051	0.047
	[0.082]	[0.081]	[0.082]	[0.082]
N	635	635	635	634
Dep. mean	0.57	0.57	0.57	0.57
Balancing controls		x	X	x
Area FE			X	X
Other BL covariates				X

Notes: In Panel A, the dependent variable is a binary variable that indicates whether a woman's stated ideal method at counseling differs from her stated ideal method at follow-up. In Panel B, the dependent variable is a binary variable that indicates if the woman's method use at counseling differs from her method use at follow-up. In Panel C, the dependent variable is a binary variable that indicates if the woman's stated ideal method at counseling differs from her method use at follow-up. In Panel D, the dependent variable is a binary variable that indicates if the woman's method use differs from her stated ideal method at follow-up. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), and ethnicity (1 = Chewa). Heteroskedastic-robust standard errors are presented in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

#### K Interaction Effects of the Two Interventions

Given our limited sample size, we estimated that we would ex ante lack statistical power to be able to detect interaction effects between the two interventions on our key outcomes, which we pre-specified in our study protocol (Karra and Zhang, 2020). For completeness, however, we present a fully interacted specification of our two interventions across key outcomes and by method type in Table K.1 and Table K.4. Findings from these tables generally support the conclusions that we have drawn from analyzing the interventions separately, although the estimates of intervention impact are generally less significant due to the wider confidence intervals that are obtained with our limited sample.

To more effectively understand how the two interventions may reinforce each other, we follow Athey et al. (2021) and investigate the stratified impact of partner invitations on our key outcomes among those women who were randomly assigned to the short, tailored counseling group and the standard, long counseling group, respectively. Interestingly, the positive impacts of partner invitations for implants are largely driven by the subgroup of women who were assigned to the short, tailored counseling group. We display the results of the intervention effect of the partner invitation effect among the tailored counseling group in Table K.2. In particular, for women who were administered a short counseling session and who chose implants as their ideal method right after counseling, partner invitations make them significantly more likely to be using implants at the follow-up. Furthermore, partner invitations make women more likely to report implants as their ideal contraceptive method at the follow-up, and exhibit concordance between their stated ideal method and method use at the follow-up session. These effects were driven by the short, tailored counseling group.

By the same token, the negative impacts of partner invitations for pills are also driven by the short, tailored counseling group of women. For women who were administered a short counseling session and who chose pills as their ideal contraceptive method right after the counseling session, partner invitations make them less likely to be using pills at the follow-up. Also, partner invitations make women less likely to report pills as their ideal method at the follow-up, or exhibit concordance at the follow-up session. These effects are exclusively driven by women who were assigned to the short, tailored counseling group. The findings suggest that a more targeted, and shorter, counseling session may have facilitated concordance in preferences for contraception between women and their male partners, although it is not clear exactly how concordance was achieved (and what may have been given up by either party to achieve concordance).

Analogously, we examine the impact of the short, tailored counseling intervention on key outcomes by method type among the subgroups of women who received and who did not receive partner invitations, respectively. The main estimates for the impact of short, tailored counseling on key outcomes by method type are presented in Table J.2. The results of the intervention effect of the short, tailored counseling intervention among the partner invitation group can be seen in Table K.3. Among women who were using injectables at follow-up, we find that short, targeted counseling induces them to be less satisfied with this contraceptive method; however, the choice to invite their partner to counseling was not exclusively driving this impact. Rather, this impact of short, targeted counseling on the concordance at the follow-up can be seen regardless of whether or not women were encouraged to invite their partners to counseling.

Table K.2: Treatment Effect of the Partner Invitation Intervention by Method Type, among Women who were Assigned to the Short, Tailored Counseling Intervention

	Implants	Injectables	Pills	Rhythm/Withdrawal/Traditional			
A. Post-Counseling Stated Ideal Method: Method Above							
Partner Invitation	0.042	0.049	-0.038**	-0.007			
	[0.045]	[0.041]	[0.021]	[0.016]			
N	365	365	365	365			
Control mean	0.38	0.35	0.06	0.02			
	B. Fol	low-up Metl	nod: Metho	od Above			
Partner Invitation	0.059	0.024	-0.033	-0.031**			
	[0.046]	[0.051]	[0.029]	[0.016]			
N	365	365	365	365			
Control mean	0.27	0.41	0.10	0.04			
C. FUP meth	nod = Post	-Counseling	Stated Ide	al Method: Method Above			
Partner Invitation	0.098***	0.028	-0.046***	-0.011*			
	[0.039]	[0.041]	[0.018]	[0.008]			
N	365	365	365	365			
Control mean	0.15	0.21	0.06	0.01			
D	. Follow-up	Stated Idea	al Method:	Method Above			
Partner Invitation	0.125***	0.021	-0.052**	-0.016**			
	[0.048]	[0.047]	[0.028]	[0.010]			
N	365	365	365	365			
Control mean	0.29	0.31	0.09	0.02			
E. FUP Method = FUP Stated Ideal Method: Method Above							
Partner Invitation	0.074**	0.025	-0.057***	-0.016**			
	[0.034]	[0.039]	[0.022]	[0.010]			
N	365	365	365	365			
Control mean	0.10	0.16	0.07	0.02			

Notes: The dependent variable in Panel A indicates whether a woman's stated ideal method at the post-counseling stage is the method specified above. The dependent variable in Panel B indicates whether her method use at the follow-up is the method specified above. The dependent variable in Panel C takes 1 if both the post-counseling stated ideal method and the follow-up method use are the method specified above. The dependent variable in Panel D takes 1 if the follow-up stated ideal method is the method specified above. The dependent variable in Panel E takes 1 if both her stated ideal method and her method use at follow-up are the method specified above. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), ethnicity (1 = Chewa), and pre-counseling method being injectables, pills, or condoms (1 = yes). Area fixed effects are included in all specifications. Heteroskedasticity-robust standard errors are in brackets.

\*\*\* 1%, \*\* 5%, \* 10%.

Table K.3: Treatment Effect of the Short, Tailored Counseling Intervention by Method Type, among Women who were Assigned to the Partner Invitation Intervention

	Implants	Injectables	Pills	Rhythm/Withdrawal/Traditional
A. Post-C	ounseling	Stated Ideal	Method:	Method Above
Short, Targeted Counseling	-0.017	0.006	-0.039**	-0.007
	[0.040]	[0.038]	[0.020]	[0.013]
N	368	368	368	368
Control mean	0.43	0.41	0.06	0.02
	B. Follow-	up Method:	Method A	Above
Short, Targeted Counseling	0.027	-0.014	-0.009	-0.015*
	[0.043]	[0.049]	[0.025]	[0.012]
N	368	368	368	368
Control mean	0.31	0.46	0.07	0.02
C. FUP Method =	= Post-Cou	unseling Stat	ed Ideal I	Method: Method Above
Short, Targeted Counseling	0.007	-0.053*	-0.022**	-0.010*
	[0.039]	[0.039]	[0.013]	[0.007]
N	368	368	368	368
Control mean	0.25	0.31	0.03	0.01
D. Foll	low-up Sta	ted Ideal M	ethod: Me	ethod Above
Short, Targeted Counseling	0.040	-0.047	-0.009	-0.005
	[0.049]	[0.047]	[0.022]	[0.005]
N	366	366	366	366
Control mean	0.36	0.40	0.05	0.01
E. FUP Met	hod = FU	P Stated Ide	eal Metho	d: Method Above
Short, Targeted Counseling	-0.012	-0.080**	-0.008	0.000
-	[0.038]	[0.042]	[0.013]	[.]
N	366	366	366	366
Control mean	0.19	0.28	0.02	0.00

Notes: The dependent variable in Panel A indicates whether a woman's stated ideal method at the post-counseling stage is the method specified above. The dependent variable in Panel B indicates whether her method use at the follow-up is the method specified above. The dependent variable in Panel C takes 1 if both the post-counseling stated ideal method and the follow-up method use are the method specified above. The dependent variable in Panel D takes 1 if the follow-up stated ideal method is the method specified above. The dependent variable in Panel E takes 1 if both her stated ideal method and her method use at follow-up are the method specified above. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), ethnicity (1 = Chewa), and pre-couseling method being injectables, pills, or condoms (1 = yes). Area fixed effects are included in all specifications. Heteroskedasticity-robust standard deviations are in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

Table K.4: Interaction Effects of the Short Counseling and Partner Invitation Interventions, by Method Type

	Implants	Injectables	Pills	Rhythm/Withdrawal/Traditional
Post-Counseling S	Stated Ide	al Method: N	Method A	bove
Partner Invitation	0.010	0.035	0.000	0.026***
	[0.050]	[0.040]	[0.029]	[0.011]
Short, Targeted Counseling	-0.041	-0.020	0.002	0.024**
, ,	[0.054]	[0.043]	[0.030]	[0.013]
Partner Invitation × Short, Targeted Counseling	0.028	0.024	-0.041	-0.032**
, ,	[0.067]	[0.057]	[0.035]	[0.019]
N	637	637	637	637
Control mean	0.41	0.34	0.06	0.01
Follow-u	ıp Method	l: Method A	bove	
Partner Invitation	0.016	-0.056	-0.011	0.009
Tariner invitation	[0.054]	[0.060]	[0.032]	[0.015]
Short, Targeted Counseling	-0.014	-0.095*	0.017	0.022
bhort, rangeted Counseling	[0.056]	[0.062]	[0.035]	[0.018]
Partner Invitation × Short, Targeted Counseling	0.039	0.084	-0.026	-0.041**
Tarther invitation × Short, Targeted Counseling	[0.070]	[0.079]	[0.042]	[0.022]
N	637	637	637	637
Control mean	0.30	0.43	0.09	0.03
FUP Method = Post-Cou	inseling St	ated Ideal M	lethod: M	ethod Above
Partner Invitation	0.074*	0.022	-0.007	0.013**
	[0.048]	[0.043]	[0.022]	[0.008]
Short, Targeted Counseling	-0.021	-0.064*	0.020	0.012*
	[0.047]	[0.045]	[0.025]	[0.009]
Partner Invitation $\times$ Short, Targeted Counseling	0.022	0.011	-0.041*	-0.024**
	[0.061]	[0.060]	[0.028]	[0.012]
N	637	637	637	637
Control mean	0.17	0.22	0.05	0.01
Follow-up Stat	ted Ideal N	Method: Met	hod Abov	re
Partner Invitation	-0.011	0.041	-0.038	0.007
	[0.061]	[0.058]	[0.033]	[0.005]
Short, Targeted Counseling	-0.084*	-0.039	-0.000	0.018**
, ,	[0.060]	[0.057]	[0.037]	[0.010]
Partner Invitation × Short, Targeted Counseling	0.125*	-0.005	-0.013	-0.024**
, ,	[0.077]	[0.075]	[0.043]	[0.012]
N	634	634	634	634
Control mean	0.33	0.31	0.09	0.01
FUP Method = FU	P Stated I	deal Method	l: Method	Above
Partner Invitation	0.045	-0.005	-0.002	0.001
	[0.047]	[0.052]	[0.018]	[0.002]
Short, Targeted Counseling	-0.039	-0.124***	0.045**	0.017**
, zurgovod commoning	[0.044]	[0.051]	[0.024]	[0.010]
Partner Invitation × Short, Targeted Counseling	0.028	0.043	-0.056**	-0.018**
Tarvino Introducti / Onore, Targeted Counseling	[0.058]	[0.066]	[0.027]	[0.011]
N	634	634	634	634
Control mean	0.12	0.19	0.06	0.01
Constor intain	0.12	0.13	0.00	0.01

Notes: The dependent variable in the first panel indicates if a woman's stated ideal method at the post-counseling stage is the method specified above. The dependent variable in the second panel indicates if her method use at the follow-up is the method specified above. The dependent variable in the third panel takes 1 if both her post-counseling stated ideal method and her follow-up method use are the method specified above. The dependent variable in the fourth panel takes 1 if her follow-up stated ideal method is the method specified above. The dependent variable in the fifth panel takes 1 if both her stated ideal method and her method use at follow-up are the method specified above. Balancing control variables include a woman's age, her contraceptive use at baseline, and whether her most valued attribute was contraceptive effectiveness. Other baseline covariates include: her total number of children, educational attainment (primary, secondary, higher), work status (1 = working), ethnicity (1 = Chewa), and pre-couseling method being injectables, pills, or condoms (1 = yes). Area fixed effects are included in all specifications. Heteroskedasticity-robust standard errors are in brackets. \*\*\* 1%, \*\* 5%, \* 10%.

# L Results by Women's Concordance between their Method Use and Top Attribute at Baseline

Based on the method-attribute correspondence specified in Figure A.5 and Figure A.6, we stratify women into two groups based on whether their method at baseline aligned with their reported top attribute in choosing a contraceptive method at baseline. Among the 638 women who received both a counseling session and who were followed up either at the clinic, by phone, or at home, 387 women (60.1 percent) reported being concordant between their method use and reported top attribute at baseline.

For women who were concordant in their method use and reported top attribute at baseline, the partner invitation intervention reduces their likelihood of changing their stated ideal method following counseling, plausibly because of their ex ante concordance. However, the partner invitation intervention has no observable impact on changes in these women's method use over time. Given their initially high levels of concordance, these women who were encouraged to invite their partner to counseling were strongly less likely to be discordant between their stated ideal method and method use at follow-up. In contrast, for women who were discordant between their method use and top method attribute at baseline, the partner invitation intervention increases their likelihood of discontinuing a method from counseling to follow-up even though their is no observable impact on their stated ideal method. From Panel B of Table L.2, these women were slightly less likely to be discordant between their stated ideal method and method use at counseling, but their discordance at follow-up does not seem to be significantly changed by the partner invitation intervention.

For women who were concordant in their method use and top attribute in choosing a contraceptive method at baseline, tailored counseling marginally increases their likelihood of changing their stated ideal method following counseling, and women are 2.3 p.p. more likely to adopt a contraceptive method from counseling to follow-up (control mean: 0.01). From Panel B of Table L.3, these women who were concordant in their method use and top

Table L.1: Treatment Effect of the Partner Invitation Intervention, among Women who were Concordant between Method Use and Top Attribute at Baseline

	A.	Stated Ideal Metl	nod and Method U	se		
	Change to State Betwe		Change in Method Use Between			
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	-0.079**	-0.161***	0.012	0.024	-0.009	
	[0.041]	[0.052]	[0.011]	[0.029]	[0.021]	
N	386	383	386	386	386	
Control mean	0.24	0.54	0.01	0.07	0.05	
		B. Disc	ordance			
	Whether Methor is Discorda			Use at Counseling ant with		
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP		
Partner Invitation	-0.125***	-0.053	-0.136***	-0.060		
	[0.051]	[0.052]	[0.051]	[0.052]		
N	386	383	386	383		
Control mean	0.48	0.56	0.48	0.57		

Table L.2: Treatment Effect of the Partner Invitation Intervention, among Women who were Discordant between Method Use and Top Attribute at Baseline

	A.	Stated Ideal Meth	nod and Method U	se		
	Change to State Betwe		Change in Method Use Between			
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)	
Partner Invitation	0.001	0.060	-0.039	0.027	0.045*	
	[0.056]	[0.067]	[0.035]	[0.035]	[0.030]	
N	251	251	251	251	251	
Control mean	0.25	0.41	0.10	0.07	0.03	
		B. Disc	ordance			
	Whether Methor is Discorda			Use at Counseling ant with		
	Stated Ideal Method after Counseling	Stated Ideal Method at FUP	Stated Ideal Method after Counseling	Stated Ideal Method at FUP		
Partner Invitation	-0.023	0.003	-0.100*	-0.006		
	[0.064]	[0.061]	[0.061]	[0.061]		
N	251	251	251	251		
Control mean	0.61	0.66	0.66	0.67		

Table L.3: Treatment Effect of the Short Counseling Intervention, among Women who were Concordant between Method Use and Top Attribute at Baseline

	A. Star	ted Ideal Method	and Method Use		
	Change to State Between		Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)
Short, Targeted Counseling	0.062*	0.068*	0.023**	-0.011	0.013
	[0.040]	[0.051]	[0.013]	[0.030]	[0.019]
N	386	383	386	386	386
Control mean	0.14	0.42	0.01	0.09	0.03
		B. Discorda	nce		
	Whether Metho	d Use at FUP	Whether Method Use at Counseling		
	is Discordant with		is Discordant with		
	Stated Ideal Method				
	after Counseling	at FUP	after Counseling	at FUP	
Short, Targeted Counseling	0.096**	0.133***	0.132***	0.141***	
	[0.050]	[0.051]	[0.050]	[0.051]	
N	386	383	386	383	
Control mean	0.34	0.46	0.31	0.46	

attribute and who received a short, tailored counseling exhibit a higher discordance between their stated ideal method and method use following counseling. In contrast, for women who were discordant between their method use and top method attribute at baseline, we observe no significant impact of the tailored counseling intervention on outcomes.

Table L.4: Treatment Effect of the Short Counseling Intervention, among Women who were Discordant between Method Use and Top Attribute at Baseline

	A. Stat	ted Ideal Method	and Method Use		
	Change to Stated Between		Change in Method Use Between		
	Pre-Counseling and Post-Counseling	Counseling and Follow-Up	Counseling and Follow-Up (Adoption)	Counseling and Follow-Up (Switching)	Counseling and Follow-Up (Discontinuation)
Short, Targeted Counseling	-0.006	0.005	-0.039	-0.004	-0.011
	[0.054]	[0.065]	[0.035]	[0.038]	[0.029]
N	251	251	251	251	251
Control mean	0.22	0.44	0.10	0.11	0.06
		B. Discorda	ince		
	Whether Method Use at FUP is Discordant with		Whether Method Use at Counseling is Discordant with		
	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	Stated Ideal Method	
	after Counseling	at FUP	after Counseling	at FUP	
Short, Targeted Counseling	0.013	0.018	0.031	-0.022	
	[0.063]	[0.061]	[0.061]	[0.060]	
N	251	251	251	251	
Control mean	0.57	0.61	0.57	0.64	