## **TECHNICAL REPORT**

## Monitoring the Quality Assurance Branding Campaign *Confiance Totale* in Côte d'Ivoire



**APRIL 2021** 









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#### Contact

4301 Connecticut Avenue NW, Suite 280 | Washington, DC 20008 +1 202 237 9400 | BreakthroughResearch@popcouncil.org breakthroughactionandresearch.org **TECHNICAL REPORT** APRIL 2021

## Monitoring the Quality Assurance Branding Campaign *Confiance Totale* in Côte d'Ivoire

Martha Silva<sup>1</sup>

Komlan Edan<sup>2</sup>

Leanne Dougherty<sup>3</sup>

<sup>1</sup>Tulane University <sup>2</sup>Independent Consultant <sup>3</sup>Population Council

## Acronyms

CATI	Computer Assisted Telephone Interviewing
СТ	Confiance Totale
DHS	Demographic and Health Survey
FP	Family Planning
LAM	Lactation Amenorrhea Method
PMA	Performance Accountability Monitoring
OR	Odds Ratio
SBC	Social and Behavior Change
USAID	U.S. Agency for International Development

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IV MONITORING THE QUALITY ASSURANCE BRANDING CAMPAIGN CONFIANCE TOTALE IN CÔTE D'IVOIRE

## **Executive Summary**

This report summarizes results from a study conducted by Breakthrough RESEARCH, USAID's flagship global social and behavior change (SBC) research and evaluation project, to monitor a family planning (FP) quality assurance branding campaign in Côte d'Ivoire called *Confiance Totale*.

Breakthrough ACTION, USAID's flagship global SBC project, aims to increase demand for and use of quality FP services in Francophone West Africa through promotion of the quality assurance brand Confiance Totale (Complete Trust). The promotional campaign, developed in early 2020, theorizes that promotion of safe and effective FP within a supportive social context will lead to an increase in demand for FP services, following the theory that mass media influence not only individual FP skills and knowledge but also environmental supports, constraints, and ideational factors in the cognitive, social, and emotional domains. These intermediate determinants reinforce intent to adopt a health-seeking behavior and enable behavioral uptake. Confiance Totale addressed these determinants by providing guidance to couples to increase communication about FP and by addressing key concerns, encouraging audiences to have confidence in the safety and effectiveness of FP methods and the need for FP services to offer welcoming, competent providers.

The *Confiance Totale* campaign in Côte d'Ivoire took place in three districts of Abidjan and two urban health districts outside the capital region from 19 May to 30 September 2020. Using the "Saturation+" approach, Breakthrough ACTION developed eight 45-second radio spots to promote *Confiance Totale* over commercial and community radio stations. Each week, one new radio spot was broadcast six times a day in three languages by each radio station. All spots were rebroadcast after eight weeks, resulting in each spot airing at least twice during the campaign period.

### The monitoring study

The monitoring study, conducted by Breakthrough RESEARCH, sought to determine (1) the level of unprompted recall of the *Confiance Totale* campaign among target beneficiaries and (2) if recall of the campaign was associated with higher levels of perceptions of FP safety, FP-related social norms, self-efficacy, spousal communication about FP, intention to talk to a partner



about FP, intention to seek FP information at a health facility, intention to use FP, and current use of FP methods. The study population consisted of male and female adults aged 18 to 49 years old who had a working mobile phone. We aimed to sample 500 men and 500 women in three waves, with a resulting total sample of 3,001 (1,514 men; 1,487 women). The study was conducted via interviewer-administered computer-assisted telephone surveys. The survey included questions related to demographic information, beliefs about FP safety and effectiveness, attitudes, social norms, FP-related communication, intent to use FP, current FP use, recall of exposure to Confiance Totale radio spots in the last month, and frequency of exposure in the last month. Univariate, bivariate, and multivariate analyses were carried out to, respectively, provide weighted point estimates for ideational and outcome variables; compare respondents with recall of *Confiance Totale* campaign in the past month to respondents with no recall; and explore factors associated with ideational factors in the cognitive domain (knowledge, attitudes, subjective norms); social domain (spousal communication, perceived social support, personal advocacy); and emotional domain (emotional response, self-efficacy) as well as with FP-related behavioral intentions and outcomes. These

data analyses were carried out separately for men and women.

### **Significant findings**

Fewer than 20% of respondents recalled being exposed to the *Confiance Totale* campaign. Statistically significant associations of recall of exposure to the *Confiance Totale* campaign were found for the following ideational and behavioral outcomes: belief in safety of FP methods (men and women), spousal communication about FP (women), high perceived self-efficacy to communicate with partner about FP (women), intent to communicate with partner about FP (women), intent to go to health facility to seek FP information (men and women), communication about FP with health provider in the previous month (men and women), and current use of FP (men and women).

### **Discussion and conclusion**

This monitoring study showed campaign recall at lower levels than expected with a Saturation+ approach yet found significant associations, particularly among women, between campaign recall and FP-supportive ideational factors targeted by the campaign, such as FP-related spousal communication. Although encouraging, such findings should be interpreted with caution, especially given inherent limitations of mobile phone surveys. While they may be indicative of the potential role a radio campaign may have in shifting key determinants of FP use, we cannot definitively conclude that campaign exposure leads to improvement in ideational factors and behavioral outcomes. Descriptive analyses showed that radio listenership was skewed male, with about a third of female participants reporting not listening to the radio at all. This finding calls into question the appropriateness of a single-channel approach for reaching women of reproductive age. Future FP campaigns in Abidjan should consider a multichannel approach to reach women, who have lower radio listenership than men, and should specifically target women nearing the end of their reproductive life since they represent an audience particularly vulnerable to unintended pregnancies.

Other notable results were drawn from multivariate analyses. Among men, relationship status (being married or living as married) arose as a significant factor associated with descriptive social norms around FP communication and FP use in their community. This may indicate that men are most attuned to FP-related social norms when they enter long-term relationships, regardless of age. Campaigns can purposefully target unmarried men to highlight the relevance and importance of FP use and promote FP as a concern for both sexes in nonpermanent relationships.

Interestingly, among male respondents, communication about FP with a health provider in the previous month was associated with intent to use FP, whereas for female respondents, spousal communication was associated with intent to use FP. Lastly, attitudes about FP safety were associated with FP use among male respondents but not female respondents. Future campaigns should note the potential need to particularly reassure male audiences about FP safety.

## Background

Modern contraceptive use in Côte d'Ivoire has been increasing in recent years. However, as in many other lower- and middle-income countries, access to family planning (FP) services is diminished by several factors related to both the demand for and supply of FP services. Insufficient information, misinformation, and fears related to side effects and loss of fertility are major factors for nonuse of modern FP in Côte d'Ivoire among couples with unmet need for FP.<sup>1</sup> Additionally, a weak health infrastructure, frequent shortages in contraceptive commodities, poor provider training, and financial impediments also make it challenging for those who do want FP services to get them in the best of times.<sup>2,3</sup> These barriers have resulted in a national-level modern contraceptive prevalence rate for all women and married women, respectively, of 21% and 19% in 2019.<sup>4</sup> Of women using modern contraceptives in Côte d'Ivoire, 56% rely on the private sector for obtaining their method, and this is likely even higher when looking strictly at urban areas.<sup>5</sup>

Mass media have been shown to have an impact on attitudes supportive of FP use, as well as FP uptake.<sup>6</sup> Mass media campaigns are more likely to reach individuals in higher wealth quintiles as well as participants who are urban and younger and have fewer children. However, messages disseminated through mass media campaigns may serve to increase interpersonal communication and even indirectly impact those who were not exposed to the original messages, making them look more favorably upon FP and reproductive health services.<sup>7</sup> The 2011–2012 Demographic and Health Survey (DHS) reported that 55% of Ivorian households owned a radio (60% in urban areas), making it an important channel of communication for social and behavior change (SBC) campaigns.<sup>8</sup>

The Saturation+ approach to mass media campaigns maximizes behavior change by focusing on three core principles: saturation (ensuring high exposure to campaign messages), science (basing campaign design on data and modeling), and stories (focusing the dramatic climax of the story on the target behavior).<sup>9</sup> Evidence suggests that achieving high exposure to messages is correlated with impact on some behaviors, particularly those considered episodic (such as care seeking).<sup>10</sup> Campaigns with clear messages reaching at least 60% of the target audience with enough frequency that the audience can recall hearing the messages from the campaign (typically, broadcasting at least six times per day will reach appropriate saturation) had highest likelihood of success.<sup>11</sup> High campaign saturation can drive behavior change by providing more opportunities for learning, priming people to adopt the behavior, creating or modifying social norms, diffusing messages through social networks, and alerting policymakers to issues that have captured public attention.<sup>12</sup> Short radio spots allow for frequent daily broadcasts across peak listening times. This format also allows production of precise health messages across a diversity of local languages.

This report summarizes results from a study conducted by Breakthrough RESEARCH, USAID's flagship global SBC research and evaluation project, to monitor a quality assurance branding campaign in Côte d'Ivoire called *Confiance Totale*.

### **Description of intervention**

Amplify-FP, U.S. Agency for International Development's (USAID) regional Francophone West Africa (FWA) service delivery investment, is developing a health facility accreditation program in collaboration with partners in 19 targeted health districts across Burkina Faso, Côte d'Ivoire, Niger, and Togo to establish and apply quality criteria for FP services in 2021. To reinforce Amplify-FP's efforts, Breakthrough ACTION, USAID's flagship SBC project, aims to increase demand for and use of quality FP services in these four countries through the development and promotion of a quality assurance brand named Confiance Totale (Complete Trust). The goal of a quality assurance branding program is twofold: to create a recognizable brand through a promotional campaign that creates trust in the health care provider and to encourage providers to improve quality through self-assessments and implementation of clear quality criteria.<sup>13</sup> The Confiance Totale campaign, developed in early 2020, offers the promise of effective, safe FP methods delivered by caring providers and encourages partners to communicate with each other about FP. The campaign theorizes that client education about safe, effective FP within a supportive social context will lead to an increase in demand for FP services.

INFIRMIÈRE / PRESTATAIRE : Voilà la nouvelle maman ! Monsieur, votre femme et votre bébé: bien [Pleurs du bébé]. Homme : Merci beaucoup madame ! Je prendrai bien soin d'eux. INFIRMIÈRE : Ici, dans notre centre, nous proposons à toutes les femmes qui accouchent ur de planification familiale pour les aider à espacer la prochaine naissance. C'est une excelle de protéger la santé du nouveau-né et celle de la mère.	se portent se portent ne méthode na femme se PSA SCRIPTS, DEVELOPED BEFORE THE COVID-19 PANDEMIC, PROMOTE HAVING CONFIDENCE IN THE SAFETY AND EFFICACY OF FP AND IN HEALTH CENTERS AND HEALTHCARE PROVIDERS AS WELL AS COUPLE COMMUNICATION Script
<ul> <li>HOMME : añ ou ! Veuncer</li> <li>repose avant de faire d'autres bébés, mais les gens parenterementer planification familiale.</li> <li>INFIRMIÈRE : Vous pouvez avoir (swoosh) confiance totale qu'une méthode de plan est avantageuse pour vous et votre famille, sans danger pour votre femme. Et il r est avantageuse pour vous et votre famille, sans danger pour votre femme. Et il r and tanger ni pour le nouveau-né ni pour la maman qui allaite. En cas d'effets seconda danger ni pour le nouveau-né ni pour la maman qui allaite. En cas d'effets seconda danger ni pour le nouveau-né ni pour la memor la méthode.</li> <li>Je suis à votre écoute pour le suivi de l'utilisation de la méthode que vous auriez che HOMME / (interjections d'approbation)</li> <li>HOMME : Aaaaaaah ! Merci madame</li> <li>pour cette explication et pour votre gentillesse. Cela nous réconforte pour l'utilisation (Voix off) : Il existe plusieurs méthodes de planification familiale parmi lesquelles votre Ayez (swoosh) confiance totale en dans votre méthode de planification familiale.</li> <li>Rendez-vous dans le centre de santé le plus proche pour avoir la méthode de planive.</li> </ul>	En fond sonore : les cris joyeux d'un enfant d'environ un an qui accourt vers son per Enfant : Papa, papa Koumi : Hééééééh fiston ! (petite pause) Chérie, ca sera bientôt le temps de faire un petit frère ou une petite soeur Assana : hummm, pas encore ! On pourrait y songer lorsqu'on aura fini remboursera la dette pour la construction de notre maison. Et puis, le petit n'a même pas encore deux ans. Koumi : huuummmm ! Tu as quand même raison. Donc, tu veux attendre encore ? Mais on ne sait pas combien de temps cela nous prendra. Mais comment faire pour ne pas nous faire surprendre par une grossesse ? Assana : (elle enchaine) J'ai entendu un spot à la radio où la dame parle de (swoosh) confiance totale en sa méthode de planification familiale. Moi aussi je veux avoir confiance totale en une méthode pour une bonne planification de notre famille. Koumi : D'accord chérie. Les prochains jours, nous irons au centre de santé y voir un agent. Voix-off : La communication est la clé d'une relation réussie. Ayez (swoosh) Confiance Totale. Parlez de la planification familiale avec votre partenaire. Rendez-vous dans le centre de santé le plus proche pour avoir la méthode de planification familiale de votre choix.

Using a Saturation+ approach to promote *Confiance Totale*, Breakthrough ACTION developed eight short 45-second radio spots that aired through commercial and community radio stations in select urban locations of Burkina Faso, Côte d'Ivoire, Niger, and Togo. We chose to conduct this monitoring study in Côte d'Ivoire for two reasons: (1) Burkina Faso already possesses a rigorous body of evidence on the impact of radio campaigns on health outcomes,<sup>9,10</sup> and (2) COVID-19–related challenges meant that we needed research partners with established local presence and partnerships, which were strongest in Côte d'Ivoire.

In Côte d'Ivoire, Breakthrough ACTION broadcasted the radio campaign in three districts of Abidjan (Abobo Ouest, Yopougon, and Bort-Bouet) and two health districts in urban areas outside of the capital region (Daloa and Bouaké Nord Ouest) from 19 May to 30 September 2020. Each week, one new radio spot (in French, Dioula, and Baoulé languages) was broadcast six times per day per language per radio station. Radio spots were broadcast again once all developed radio spots had been aired after eight weeks, resulting in all eight radio spots airing at least twice during the campaign period. Due to the sudden onset of the COVID-19 pandemic, some radio spots were adapted to deliver guidance to couples on their FP options during this time of reduced mobility, while others retained the original messages without mention of COVID-19 (see Table 1).

## TABLE 1. CONFIANCE TOTALE CAMPAIGN RADIOSPOT CONTENT

- 1 Encouraging spousal communication about birth spacing
- 2 Encouraging communication with a health provider about FP methods and managing side effects
- 3 Seeking FP services at a facility during the COVID-19 pandemic
- 4 Spousal communication about FP during the COVID-19 pandemic
- 5 Importance of giving birth in a health facility during the COVID-19 pandemic and choosing an FP method for postpartum use
- 6 Adopting the lactational amenorrhea method (LAM) for postpartum women
- 7 Raising awareness of FP method availability in pharmacies
- 8 Reminding young people to protect themselves against unintended pregnancy by using condoms during the COVID-19 pandemic

The Theory of Strategic Communication and Behavior Change (Figure 1) posits that mass media communication influences not only individual skills and knowledge related to FP but also environmental supports and constraints and ideational factors consisting of three main domains: cognitive, emotional, and social.<sup>14</sup> Cognitive ideations include knowledge, attitudes, and subjective norms; emotional ideations include emotional response and self-efficacy; and social ideations include spousal communication, perceived social support, and personal advocacy. These intermediate determinants reinforce intent to adopt a health-seeking behavior and enable behavioral uptake. The Confiance Totale campaign radio spots addressed these intermediate determinants by providing guidance to couples to increase communication about FP as well as by addressing key concerns that emerged through formative research and a literature review. These concerns included the need for audiences to have confidence in the safety and effectiveness of FP methods and the need for FP services to offer welcoming, competent providers who can counsel clients on FP methods based upon their needs.

### **Study objectives**

This study, led by Breakthrough RESEARCH, sought to answer the following monitoring questions:

- What is the level of unprompted recall of the Confiance Totale radio campaign among target beneficiaries?
- 2. Is recall of the *Confiance Totale* campaign associated with higher levels of perceptions of FP safety, FP-related social norms, self-efficacy, spousal communication about FP, intention to talk to a partner about FP, intention to seek information at a health facility, intention to use FP, and current use of FP methods?

#### FIGURE 1 IDEATIONAL MODEL OF SBC INTERVENTIONS



## Methodology

### Study location and design

A quantitative repeated cross-sectional survey was conducted in three waves between 28 August and 15 October 2020 using mobile phones in the three communes of Abidjan that were part of the Breakthrough ACTION and Amplify-FP implementation area: Abobo, Port-Bouet, and Yopougon.

### **Study population**

The study population consisted of male and female adults 18 to 49 years of age who spoke French, Dioula, or Baoulé and had a working mobile phone registered in Abidjan. We sampled 500 men and 500 women in each of the three waves for a total sample of 3,001. This sample size is based on a minimum detectable difference of six percentage points per population (women and men) in key campaign indicators with 80% power to detect a difference, alpha of 0.05. Since an estimate of baseline prevalence for indicators of interest such as spousal communication about FP were not readily available, the most conservative estimate of prevalence (around 50%) was used.

### Sampling frame

The sampling frame for this study was constructed from an active database of registered MTN mobile phone numbers managed by the mobile-based research company, Geopoll.<sup>a</sup> MTN is the second largest mobile network operator in Côte d'Ivoire, accounting for 47% of the mobile phone market in 2020. All registered MTN mobile phone subscribers (approximately 235,000 in Côte d'Ivoire of which approximately 89,000 were referenced to Abidjan) are included in the database, as well as subscriber geographic location, age, and gender. Geopoll stratified the Abidjan referenced mobile numbers by sex and then randomly selected mobile phone numbers for interviews.

### Data collection and questionnaire

The study was conducted using a computer-assisted telephone interviewing (CATI) approach consisting of interviewer-administered phone surveys. CATI interviewers were equipped and trained to make calls from their homes to ensure safety during the COVID-19 pandemic. Interviewers called a random sample of active mobile phones registered in the Abidjan region. During every answered call, interviewers gave a brief overview of the survey and asked eligibility questions (age and residence in target Abidjan districts). The interviewer obtained verbal consent of those willing to participate and proceeded with an interview lasting approximately 15 minutes. Callbacks were attempted up to three times when the participant was not available to talk, after which the number was considered a nonresponse. This procedure was repeated until the target sample per sex was achieved. The first wave of data collection lasted approximately one month due to a small field team. Once the field team size increased, the second and third waves of data collection were shortened to approximately one week. Between 45% and 49% of all calls initiated across the three waves of data collection resulted in a completed survey (see Table 2).<sup>b</sup> Data were encrypted and sent for storage on a secure password-protected server.

The survey included questions related to demographic information (age, education, relationship status, number of children); FP ideations (beliefs about FP safety and effectiveness, attitudes, social norms, FP-related communication); intent to use FP and current use of FP; recall of exposure to *Confiance Totale* radio spots in the last month; and frequency of exposure in the last month (see Annex A for the questionnaire).

<sup>&</sup>lt;sup>a</sup>The database was last updated in May 2020.

<sup>&</sup>lt;sup>b</sup>The sex of the respondent was only recorded once consent was obtained, so we do not know the sex of those who did not respond and refused and are unable to disaggregate nonresponse by sex.

#### TABLE 2 RESPONSE RATES PER WAVE

	WAVE 1	WAVE 2	WAVE 3
Dates	18 August–22 September	24 September–2 October	8 October–15 October
Calls initiated	2,217	2,051	2,417
No response	656	651	994
Ineligible	57	104	99
Refused	486	294	321
Dropped off	17	2	3
Completed surveys	1,001 (45%)	1,000 (49%)	1,000 (41%)

### **Poststratification weights**

Although the proliferation of mobile phone networks has transformed communications in sub-Saharan African countries such as Côte d'Ivoire, it is important to note that women and people with fewer years of education are less likely to have their own mobile phones.<sup>15</sup> For this reason, mobile phone surveys tend to render samples that are skewed toward male, urban, and more educated respondents. As described above, the sample was stratified by sex. Poststratification weights were used to adjust the study data to better conform to the Abidjan population's sociodemographic parameters. To calculate poststratification weights, we compared our variables from the study dataset, per wave, to the Côte d'Ivoire 2011–2012 DHS<sup>16</sup> using two sociodemographic variables: age and education. We created sex-disaggregated weights to adjust for these two variables. These weights were calculated by dividing age and education frequencies from DHS data by age and education frequencies from the current study dataset (see Annex B).

### **Analytical methods**

Univariate, bivariate, and multivariate analyses were carried out for men and women separately using Stata 15.1 (STATA Corp, College Station, TX). Univariate analyses present weighted point estimates for all ideational and outcome variables. Bivariate analyses compare those who recall having been exposed to the *Confiance Totale* campaign in the past month versus those who have not been exposed, per wave, by sex (data not shown).

Unweighted multivariate regression models for a select number of variables explore factors associated with

cognitive, social, and emotional ideational factors; behavioral intent; and FP-related behavioral outcomes.<sup>c</sup> All outcome variables were recoded as binary variables. Table 3 provides an overview of the models by dependent variable and ideational and sociodemographic control variables. All ideational factors that were the target of the *Confiance Totale* campaign and that had a minimum level of variability in responses (i.e., where responses to any single category did not exceed 90%) were explored as dependent variables. Due to limited variability in responses, we excluded attitudes about FP effectiveness, importance, and services as ideational outcome variables.

Ideational outcomes include:

#### Cognitive ideation

 Beliefs in the safety of FP methods (completely agree or agree that FP methods are safe to use to delay or limit pregnancies versus disagree or completely disagree)

#### Social ideation

- 2. Descriptive norms associated with spousal communication about FP in their community (completely agree or agree that couples in their community talk to each other about FP versus disagree or completely disagree)
- **3.** Descriptive norms associated with use of FP in their community (completely agree or agree that couples

<sup>&</sup>lt;sup>c</sup>Unweighted regression models are presented because the underlying relationship between two or more variables is not changed by over- or under-sampling at some values of those variables.

in their community use FP methods to space or limit births versus disagree or completely disagree)

- Injunctive social norms associated with use of FP in their community (believe that others in their community approve of FP use versus disapprove)
- 5. Spousal communication about FP in the previous month (yes/no)

#### Emotional ideation

6. Perceived self-efficacy to communicate with partner about FP (highly confident that they can talk to their partner about FP)

Behavioral intent outcomes include:

- Intent to communicate about FP with a partner in the coming month (yes/no)
- Intent to go to a health facility to seek information about FP in the coming six months (yes/no)
- 9. Intent to use FP in the coming six months (yes/no)

Behavioral outcomes include:

- **10.** Communication with a health provider about FP in the previous month (yes/no)
- **11.** Current use of FP (self or partner) (yes/no)

All models are interpreted using odds ratios. We use time fixed-effects models to assess whether recall of campaign exposure in the past month was significantly associated with the outcome of interest, controlling for time and sociodemographic characteristics such as age (18-24, 25-34, 35+); education (none, incomplete primary, complete primary, incomplete secondary, complete secondary, university); relationship status (married or living with someone as married versus not); and number of children (0, 1–2, 3+). Models also control for relevant ideational factors (see Table 3). We chose ideational control variables for each outcome based on hypothesized associations, avoiding collinearity among independent variables by calculating Spearman correlation coefficients and eliminating variables that had a correlation coefficient higher than 0.6.

Our key independent variable is unprompted recall of the *Confiance Totale* campaign in the month prior to each survey wave, which was categorized as heard campaign radio spots at least once a day, at least once a week, less frequently than once a week, and not at all.

As mentioned above, we control for the impact of time in multivariate analyses. Time is controlled for since the campaign was ongoing throughout the survey data collection period; therefore, as the data collection period progressed, potential respondents would have a higher likelihood of exposure. The time variable represents weekly installments of the data collection period for a total of eight weeks. This variable may capture a combination of (1) secular trends, (2) the effect of other related or unrelated FP promotion activities ongoing in these communities, and (3) potentially cumulative exposure to the *Confiance Totale* campaign. However, we are unable to test for the contribution of each of these three factors potentially captured in the time variable.

### **Ethical approval**

Ethical approval for this study was obtained from the Comité National d'Éthique des Sciences de la Vie et de la Santé in Côte d'Ivoire (Ref: 090-20/MDHP/CNESVS-km) and the Population Council Institutional Review Board (#EX2020013).

DEPENDENT VARIABLE DOMAIN	DEPENDENT VARIABLE	KEY INDEPENDENT VARIABLE	IDEATIONAL CONTROL VARIABLES	SOCIODEMOGRAPHIC CONTROL VARIABLES
Cognitive Ideation	Attitudes about FP safety		<ul> <li>Descriptive social norms about use of FP</li> </ul>	
	Descriptive social norms surrounding spousal communi- cation about FP		<ul> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> </ul>	
	Descriptive social norms surrounding use of FP		<ul> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> </ul>	
Social Ideation	Injunctive social norms surrounding use of FP		<ul> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> </ul>	
	Spousal communi- cation about FP		<ul> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Perceived self-efficacy to communicate with partner about FP</li> <li>Descriptive social norms surrounding spousal communication about FP</li> </ul>	
Emotional Ideation	Perceived self- efficacy to commu- nicate with partner about FP		<ul> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Descriptive social norms surrounding spousal communication about FP</li> </ul>	Time
	Intent to commu- nicate with partner about FP	Unprompted recall of <i>Confiance</i> <i>Totale</i> exposure	<ul> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Perceived self-efficacy to communicate with partner about FP</li> <li>Descriptive social norms surrounding spousal communication about FP</li> </ul>	Age Education Relationship status Number of children
Behavioral Intent	Intent to go to health facility to seek FP information		<ul> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Attitudes toward health facility</li> <li>Spousal communication about FP</li> <li>Descriptive social norms surrounding use of FP</li> <li>Attitudes about FP safety, effectiveness, and importance</li> </ul>	
	Intent to use FP		<ul> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> <li>Descriptive social norms surrounding use of FP</li> <li>Attitudes about FP safety, effectiveness, and importance</li> </ul>	
	Communicated with health provider in previous month		<ul><li>Current use of FP</li><li>Attitudes toward health facility</li><li>Spousal communication about FP</li></ul>	
Behavioral Outcome	Current use of FP		<ul> <li>Spousal communication about FP</li> <li>Descriptive and injunctive social norms surrounding use of FP</li> <li>Attitudes about FP safety effectiveness, and importance</li> </ul>	

#### TABLE 3 DESCRIPTION OF MULTIVARIATE MODELS

## **Key Findings**

### Sample description

Overall, the study sample included 1,514 male respondents and 1,487 female respondents (see Table 4a). Among men, respondents were generally equally distributed across age groups, while among women the study reached about twice as many women in the youngest age group (18–24) as it did in the oldest age group (35+). An overwhelming majority of study respondents had attained an educational level of at least incomplete secondary school, and over 50% of both men and women were married or living as such with a partner. Overall, slightly more than half of all male and female respondents had children; most had one or two. Radio listenership was higher among men than among women. Over a third of male respondents reported listening to the radio every day, compared to about 14% of women. Importantly for a campaign of this nature, over a quarter of all female respondents (26%) reported not listening to a radio at all, compared to only 11% of men.

#### Cognitive ideation: Attitudes

Overall, in Figures 2a–2d we observe very high levels of positive attitudes toward FP and FP services. Around 90% of men and women completely agreed or agreed that FP is important and effective in delaying or limiting pregnancies. This number lowers somewhat when asked about FP safety (around 80%).

#### Social ideation: Norms

Figures 3a–3c show social norm data across all three waves by sex. There was an increase from the first to the second wave in the percentage of women who stated that couples in their community discussed FP and that others in the community use FP and agreed that the community approves of FP use. However, this declined for all three measures during the third wave. We observed less variation for all three measures and no discernable trends among men.



\*If a value is not shown, it is less than 1%.

#### Females Males

#### 3A BELIEF THAT COUPLES IN THEIR COMMUNITY DISCUSS FP







#### Emotional ideation: Self-efficacy

Lastly, in Figures 4a and 4b we explore perceived self-efficacy of spousal communication as well as spousal communication in the previous month. On average, slightly less than half of all respondents reported feeling highly confident about their ability to talk to their partners about FP, and an additional 23% reported feeling moderately confident. However, among both male and female respondents, we can observe a downward trend across study waves for those feeling highly confident. Despite this, we observe limited change in the "not confident" category and more movement in the proportion of respondents reporting to feel moderately confident. Despite these high levels of perceived self-efficacy, only about one-third of respondents reported talking to their partner about FP in the previous month.







#### 4B TALKED TO PARTNER ABOUT FP IN PAST MONTH\*

\*If a value is not shown, it is less than 1%.

Table 5 presents point estimates for behavioral intent, behavioral outcomes, and recall of the *Confiance Totale* campaign. In total, over half of male and female respondents reported intent to go to a health care facility to seek information about FP in the next six months. However, in both cases we also observe a declining trend, going from about 68% of respondents reporting intent during wave 1 to 43% among men and 50% among women during wave 3. We see a similar pattern of declining trends with reported intent to talk about FP

## TABLE 5 SAMPLE DESCRIPTION-BEHAVIORAL INTENT, BEHAVIORAL OUTCOME AND CAMPAIGN EXPOSURE (%)

	MALE				FEMALE			
	TOTAL	WAVE 1	WAVE 2	WAVE 3	TOTAL	WAVE 1	WAVE 2	WAVE 3
Behavioral intent								
Intent to go to a health care facility to seek information about FP in next six months								
Yes	53.7	68.0	49.9	43.1	58.1	67.8	56.7	49.8
No	41.8	29.1	45.9	50.4	35.0	29.6	35.1	40.2
Don't know	4.5	2.9	4.2	6.5	6.9	2.6	8.2	10.0
Ν	1,514	504	510	500	1,483	495	488	500
Intent to talk about FP with partner in the next month								
Yes	68.1	71.8	66.2	65.6	62.9	67.9	63.5	56.8
No	27.6	23.4	29.4	30.5	32.1	28.6	31.2	37.0
Don't know	4.3	4.8	4.4	3.9	5.0	3.5	5.3	6.2
Ν	1,367	479	447	441	1,363	469	453	441
Intent to use FP in next six months (among nonusers)								
Yes	32.7	49.2	24.3	23.1	33.0	42.3	30.2	26.9
No	64.5	48.4	71.1	75.6	64.6	55.3	68.1	70.2
Don't know	2.8	2.4	4.6	1.3	2.4	2.4	1.7	2.9
Ν	499	175	174	150	539	196	144	199
Behavioral outcome								
Talked to health care provider about FP in last month								
Yes	8.1	12.2	4.1	8.2	15.3	20.7	11.1	13.8
No	91.6	87.8	95.5	91.3	84.6	79.3	88.7	86.2
Don't know	0.3	0.0	0.4	0.5	0.1	0.0	0.2	0.0
Ν	1,514	504	510	500	1.487	497	490	500
Current use of FP								
Yes	61.3	58.5	60.6	65.0	60.5	60.5	65.9	55.2
No	36.5	38.5	37.5	33.5	37.8	37.6	33.1	42.6
Don't know	0.8	1.3	0.5	0.6	0.6	1.2	0.4	0.0
Currently pregnant	1.4	1.7	1.4	0.9	1.1	0.7	0.6	2.2
Ν	1,514	504	510	500	1,485	496	489	500
<i>Confiance Totale</i> (CT) exposure recall								
Heard a <b>Confiance Totale</b> radio spot in the last month								
At least once a day	8.5	14.8	6.0	4.7	9.4	13.1	6.7	8.4
At least once a week	8.2	11.7	9.2	3.7	6.0	11.2	3.9	3.0
Less frequently than once a week	1.9	1.9	3.0	0.8	2.5	3.7	1.8	1.8
Not at all	81.1	70.8	81.8	90.8	82.0	71.6	87.6	86.8
Don't know	0.3	0.8	0.0	0.0	0.1	0.4	0.0	0.0
Ν	1,505	497	508	500	1,474	489	488	497

with a partner in the next month and intent to use FP in the next six months. On average, about two-thirds of respondent's reported intent to talk to a partner, while about one-third of respondents reported intent to use FP in the next six months.

On average, about 8% of men and 15% of women reported having talked to a health provider about FP in the month preceding the survey. A surprisingly high number of respondents reported currently using FP, probably a reflection of the level of the study participants' educational attainment and urban location. On average, 61% of both men and women reported current use of FP. We see an ascending trend among male respondents only (58.5% to 65%). This is in contrast with 28.4% of urban women who reported using any FP method in the 2018 Performance Monitoring for Accountability (PMA) 2020 survey.<sup>17</sup>

Lastly, fewer than 20% of respondents recalled being exposed to the *Confiance Totale* campaign. Again, we see a declining trend in the number of people recalling any exposure by wave among both male and female respondents. During wave 1, 71% of men and 72% of women did not recall campaign exposure, whereas by wave 3, these numbers had increased to 91% of men and 87% of women. were also more likely to believe FP is safe than those not recalling exposure to the campaign (p < .05).

In addition, both male and female respondents who reported that they believed other couples in their community were using FP methods to avoid or delay pregnancies were respectively 2.4 and 3.1 times more likely to perceive FP as safe (p < .001). A significant time trend was observed among male respondents only. For each additional week of data collection, male respondents were 12% more likely to report that FP methods are safe (OR = 1.12, p < 0.01). Education was the only significantly associated sociodemographic characteristic for both male and female respondents. Men who did not have any education, those who had incomplete primary studies, and those with a university-level education were all less likely to view FP methods as safe compared to those who had completed primary education (OR = 0.35, 0.34, 0.37 respectively, p < .01). Female respondents with university-level education were less likely to believe in the safety of FP methods (OR = 0.24, p < .001). Talking to a health care provider about FP, having children, and respondent's age or relationship status were not significantly associated with their perception that FP methods are safe.

## Cognitive ideational factors

#### Factors associated with attitudes about FP safety

Table 6 shows factors associated with the belief that FP is safe to use in delaying or limiting pregnancies. For both male and female respondents, recall of the Confiance Totale campaign was significantly associated with positive attitudes about FP safety. Male respondents who recalled hearing Confiance Totale radio spots at least once a day were 2.7 times more likely to believe that FP methods are safe compared to those not exposed to the campaign (p < .01), whereas female respondents who recalled hearing radio spots at least once a week or less frequently

RADIO SCRIPT ENCOURAGING COUPLES TO HAVE FP METHOD SUPPLIES WHILE SHELTERING IN PLACE AND/OR DURING GOVERNMENT RESTRICTIONS ON MOVEMENT TO AVOID AN UNWANTED PREGNANCY AS WELL AS CONFIDENCE IN FP METHOD

(Voix de femme) Chéri, je fais un tour rapide en ville (en respectant les mesures barrières !) et au retour je vais profiter pour prendre notre méthode de planification familiale au centre de santé (elle baisse sa voix), tu sais que nous en avons vraiment besoin (Rire).

(Voix d'homme) : Oui, je sais !

(Voix de femme) : Maintenant que nous sommes très souvent ensemble à la maison, on doit penser à s'approvisionner pour quelques mois hein ! Sinon je risque d'avoir une grossesse non-planifiée ! (Elle rigole).

J'ai (swoosh) confiance totale en ma méthode de planification familiale.

(Voix de femme) : Avec cette situation du COVID 19 et la restriction des mouvements, je me protège contre la maladie à coronavirus et je me protège aussi contre les grossesses non planifiées.

(Voix off de femme) : Discutez avec votre partenaire de la méthode de planification familiale qui convient à votre couple.

(Voix off) N'hésitez pas à vous rendre dans les centres de santé pour bénéficier de conseils et prestations de planification familiale.

	MALE RE (n =	MALE RESPONDENTS (n = 1,336)		ESPONDENTS = 1,330)
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	2.71**	1.41-5.19	1.10	.61–1.96
At least once a week	1.53	.87–2.69	3.51***	1.32-9.31
Less frequently	1.47	.49-4.42	11.87*	1.46-96.67
Not at all	—	—	_	—
Time (data collection week)	1.12**	1.04-1.20	1.05	.97–1.14
Talked to a health provider about FP in last month	1.03	.60–1.77	1.40	.88–2.21
Believe other couples are using FP	2.39***	1.74-3.29	3.05***	2.10-4.41
Age group				
18–24	—	—	_	—
25–34	.82	.52–1.30	1.45	.97–2.15
35+	.84	.48–1.47	.86	.50-1.48
Married or living with someone as married	1.08	.74–1.57	1.09	.73–1.61
Number of children				
0 child	—	—	_	—
1–2 children	.98	.66–1.45	1.18	.78–1.79
3+ children	.94	.54–1.61	1.17	.64–2.15
Level of education				
None	.35**	.13–.95	1.08	.41–2.81
Incomplete primary	.34**	.15–.77	.45	.20-1.02
Complete primary	—	—	_	—
Incomplete secondary	.83	.41–1.64	.79	.40-1.58
Complete secondary	.77	.38–1.56	.69	.34-1.40
University	.37**	.19–.71	.24***	.1248

#### TABLE 6 FACTORS ASSOCIATED WITH THE LIKELIHOOD OF AGREEING THAT FP METHODS ARE SAFE

\*p < .05; \*\*p < .01; \*\*\*p < .001

### **Social ideational factors**

#### Factors associated with descriptive social norms surrounding FP spousal communication

Descriptive social norms refer to what people believe others in their community do. Table 7 shows factors associated with respondents' beliefs that other couples in their community talk to each other about FP. Notably, for both male and female respondents, exposure to *Confiance Totale* was not significantly associated with believing that other couples within their community communicate about FP. Similarly, for both male and female respondents, current use of FP and having talked to their partners about FP in the last month both significantly increased the odds of believing that other couples in their community talked about FP (all ps < .001). Among male respondents, time was significantly and positively associated with believing that other couples communicate about FP, meaning that, controlling for campaign exposure, for every additional week of data collection, respondents were more likely to believe that couples in their community communicate about FP (OR = 1.09, p < .05). Male respondents' relationship status was also positively associated with the outcome, where those married or living as such with a partner were 1.8 times more likely to hold positive descriptive social norms about spousal communication about FP (OR = 1.76, p < .001). This was not the case among female respondents. In contrast, among women, age, education, and number of children were significantly associated with this outcome. Female respondents over 35 years of age were more than twice as likely as those 18 to 24 to believe that

## TABLE 7FACTORS ASSOCIATED WITH THE LIKELIHOOD OF BELIEVING THAT OTHER COUPLES<br/>WITHIN THE COMMUNITY TALK ABOUT FP

	MALE RESPONDENTS (n = 1,216)		FEMALE RESPONDENTS (n = 1,239)	
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	1.35	.80-2.28	1.04	.63–1.70
At least once a week	1.48	.88–2.47	.72	.42–1.25
Less frequently	1.46	.59–3.61	1.04	.41–2.62
Not at all	—	_	_	—
Time (data collection week)	1.09*	1.01-1.17	1.00	.93-1.06
Current use of family planning	1.87***	1.39–2.51	2.17***	1.61-2.92
Talked to a health provider about FP in last month	1.07	.67–1.71	1.02	.68–1.53
Talked to partner about FP in last month	2.53***	1.91–3.36	2.42***	1.76-3.34
Age group				
18–24	_	_	_	_
25–34	1.44	.93–2.23	1.30	.91–1.88
35+	1.26	.75–2.14	2.16**	1.31-3.55
Married or living with someone as married	1.76***	1.27–2.44	1.22	.86–1.74
Number of children				
0 child	_	_	_	_
1–2 children	.75	.53–1.05	.72	.50-1.06
3+ children	.85	.53–1.35	.40**	.24–.68
Level of education				
None	.75	.30-1.82	1.10	.67–1.87
Incomplete primary	.73	.38-1.40	.49*	.26–.93
Complete primary	_	_	_	_
Incomplete secondary	1.04	.65-1.66	1.27	.77–2.08
Complete secondary	1.18	.72–1.96	1.11	.67–1.87
University	.69	.43–1.12	.60*	.36–.99

\*p<.05; \*\*p<.01; \*\*\*p<.001

other couples discuss FP (p < .01), while those with three or more children were less likely to believe that other couples communicate about FP compared to those who do not have children (OR = 0.4, p < .01). Those with an incomplete primary education or a university education were also less likely to believe that other couples within the community talk about FP (OR = 0.49 and 0.6 respectively, p < .05).

## Factors associated with descriptive social norms surrounding belief that other couples in the community use FP

Table 8 shows factors associated with the likelihood of believing other couples in their community use FP

methods. Once again, we note that for both male and female respondents, recall of *Confiance Totale* was not significantly associated with this outcome. Male and female respondents who were using FP at the time of the survey were more than three times more likely to believe that couples in their community use FP (OR = 3.24 and 3.03 respectively, p < .001). Additionally, for both male and female respondents, those who talked to their partner about FP in the last month were significantly more likely to believe that other couples in the community use FP (OR = 1.97 and 2.45 respectively, p < .001).

Among male respondents only, time and relationship status were also significantly associated with this

	MALE RESPONDENTS (n = 1,195)		FEMALE RESPONDENT (n = 1,218)	
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	1.03	.61–1.75	1.18	.59–2.39
At least once a week	1.21	.67–2.21	1.58	.61-4.10
Less frequently	.68	.26-1.79	.75	.22–2.54
Not at all	—	—	_	—
Time (data collection week)	1.13**	1.04-1.23	.97	.89-1.06
Current use of FP	3.24***	2.35-4.47	3.03***	2.11-4.35
Talked to a health provider about FP in last month	1.27	.72–2.23	.89	.53–1.51
Talked to partner about FP in last month	1.97***	1.41-2.75	2.45***	1.58-3.78
Age group				
18–24	—	—	_	_
25–34	1.0	.59–1.67	1.04	.66–1.66
35+	.71	.38-1.32	1.35	.75–2.44
Married or living with someone as married	1.84**	1.25-2.70	1.27	.82–1.96
Number of children				
0 child	—	—	_	—
1–2 children	1.29	.87–1.91	.75	.46-1.20
3+ children	1.36	.80-2.32	.57	.31–1.07
Level of education				
None	.76	.96–2.95	.69	.33–1.46
Incomplete primary	.77	.38–1.56	.41*	.2081
Complete primary	—	—	—	—
Incomplete secondary	1.5	.92–2.65	1.80*	1.01-3.21
Complete secondary	1.69	.96-2.96	1.73	.93-3.22
University	1.37	.81-2.33	.96	.53-1.71

## TABLE 8 FACTORS ASSOCIATED WITH THE LIKELIHOOD OF BELIEVING OTHER COUPLES IN THE COMMUNITY USE FP

\*p<.05; \*\*p<.01; \*\*\*p<.001

outcome. For every additional data collection week, male participants were about 13% more likely to believe that other couples in their community use FP, and men who were married or living with someone as married were 1.8 times more likely than those who were not to report this belief (p < .01). Among women, education was significantly associated with this belief. Compared to female respondents who had complete primary education, those who had incomplete primary education were less likely, while those who had incomplete secondary education were more likely, to report believing other couples in the community used FP (OR = 0.41 and 1.80 respectively, p < .05).

## Factors associated with injunctive social norms surrounding belief that other couples in the community use FP

Table 9 shows factors associated with the likelihood of believing that others within their community approve of FP use for spacing and limiting pregnancies. As seen in the regressions modeling descriptive social norms, recall of the *Confiance Totale* campaign was not significantly associated with male or female respondents' perceptions of community members' approval of the use of FP (injunctive social norms). Only current use of FP and spousal communication about FP in the previous month

TABLE 9	<b>FACTORS ASSOCIATED</b>	<b>WITH TH</b>	E LIKELIHOOD	<b>OF BELIEVING</b>	<b>OTHER IN</b>	THE COMMUN	ITY
	APPROVE OF FP USE						

	MALE RESPONDENTS (n = 1,241)		FEMALE R (n =	ESPONDENTS = 1,238)
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	1.16	.62–2.14	.88	.46–1.56
At least once a week	.90	.53–1.54	2.47	.99-6.13
Less frequently	.61	.26–1.47	3.92	.80–19.25
Not at all	—	—	—	—
Time (data collection week)	1.01	.92–1.09	.93	.86-1.01
Current use of FP	3.04***	2.19-4.24	3.55***	2.50-5.04
Talked to a health provider about FP in last month	1.40	.74–2.64	.78	.48-1.24
Talked to partner about FP in last month	2.09***	1.45-3.01	1.87***	1.28-2.74
Age group				
18–24	—	—	_	—
25–34	1.37	.79–2.37	1.38	.89–2.15
35+	1.12	.59–2.15	1.61	.89–2.94
Married or living with someone as married	1.01	.59–2.15	1.52	.99–2.35
Number of children				
0 child	—	—	_	—
1–2 children	.83	.54-1.28	.51**	.32–.79
3+ children	1.04	.58–1.87	.45*	.24–.84
Level of education				
None	.50	.20-1.21	.41*	.19–.86
Incomplete primary	1.20	.60–2.39	.44*	.2385
Complete primary	—	—	—	—
Incomplete secondary	2.34**	1.36-4.02	2.04*	1.14-3.64
Complete secondary	1.98*	1.12-3.50	1.21	.67–2.18
University	2.02*	1.18-3.47	.96	.53–1.73

\*p<.05; \*\*p<.01; \*\*\*p<.001

were significantly associated with injunctive social norms for both male and female respondents. Men and women currently using FP methods were about three times more likely to believe that other community members approved of FP use (p < .001), and both men and women who had talked to their partners about FP in the last month were about twice as likely to believe that other community members approved of FP use (p < .001). Educational level also was significantly associated with injunctive social norms among both male and female respondents, while number of children was significant among women only (p < .05).

## Factors associated with spousal communication about FP

Table 10 presents factors associated with couples' communication about FP. Recall of *Confiance Totale* was significantly associated with spousal communication among female respondents only. Those who recalled listening to campaign radio spots at least once a day were about 1.6 times more likely to have talked to their partner about FP in the previous month than those who did not recall the campaign at all (p < .01). Controlling for campaign exposure, time was significantly associated with this outcome for both male and female respondents. For every additional week of data collection, men were 14% more

#### TABLE 10 FACTORS ASSOCIATED WITH THE LIKELIHOOD OF HAVING TALKED TO THEIR PARTNER ABOUT FP IN THE LAST MONTH

	MALE RESPONDENTS (n = 1,211)		FEMALE RESPONDENTS (n = 1,239)	
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	1.96	.93–2.62	1.63*	1.03-2.60
At least once a week	1.47	.90-2.41	1.56	.90–2.70
Less frequently	.52	.18–1.51	.66	.65-3.53
Not at all	_	_	_	_
Time (data collection week)	1.14***	1.06-1.23	1.10**	1.02-1.18
Current use of FP	4.91***	2.99-5.92	3.81***	3.42-6.40
Talked to a health provider about FP in last month	2.28***	1.37-3.79	3.66***	2.56-5.21
High confidence that they can talk to partner about FP	2.72***	2.08-3.55	3.01***	2.29-3.95
Believe people in their community talk to their partner about FP	2.69***	2.02-3.58	2.50***	1.81-3.46
Age group				
18-24	—	_	_	—
25–34	1.08	.69–1.70	1.32	.91–1.93
35+	1.09	.64–1.85	1.04	.63–1.71
Married or living with someone as married	1.85***	1.32-2.60	1.55**	1.09-2.20
Number of children				
0 child	—	_	_	—
1–2 children	1.12	.79–1.58	.92	.63–1.34
3+ children	1.55	.97–2.48	1.07	.64–1.79
Level of education				
None	.97	.38–2.80	1.41	.74–2.70
Incomplete primary	1.21	.54–2.69	.92	.48-2.09
Complete primary	_	_	_	—
Incomplete secondary	1.66	.98-2.83	1.22	.75–1.99
Complete secondary	1.28	.74-2.19	.98	.58–1.65
University	1.22	.71–2.09	.73	.43–1.26

\*p<.05; \*\*p<.01; \*\*\*p<.001

likely and women were 10% more likely to have talked to their partner about FP.

Among both male and female respondents, use of FP at the time of the survey, having talked to a health provider about FP in the previous month, perceived self-efficacy about communicating with a partner, descriptive social norms about spousal communication, and relationship status were all significantly associated with respondents having communicated with their partner about FP in the previous month. Those who were using FP at the time of the survey were about four times more likely to have talked to their partner in the previous month about it (OR [men/women respectively] = 4.91 and 3.81, p < .001), while those who had talked to a health care provider in the previous month were 2.3 (men) and 3.7 (women) times more likely to have talked to their partners (p < .001). Those who had a high level of confidence that they can talk to their partner about FP were 2.7 (men) and 3 (women) times more likely to have talked to them (p < .001), and those who believed that people in their community talk to their partners about FP were more than twice as likely to have talked to them (OR = 2.7 and 2.5 respectively, p < .001). Lastly, participants who were married or living with someone as married were 1.9 times more likely (men) and 1.6 times more likely (women)to report this outcome (p < .001 and < .01 respectively).

### **Emotional ideational factors**

## Factors associated with self-efficacy in talking with partner about FP

Table 11 presents factors associated with self-efficacy, as measured by feeling highly confident about talking to a partner about FP. Recall of exposure to *Confiance Totale* was significantly associated with high self-efficacy among female respondents only. Those that recalled being exposed to the campaign were 2.3 times more likely to report high confidence compared to those who did not recall the campaign (p < .001).

For both men and women alike, current use of FP, communicating with a health provider, level of education, and time were all significantly associated with high perceived self-efficacy. Participants who were currently using FP were 1.9 times (men) and 1.6 times (women) more likely to report high self-efficacy, and those who talked to a health provider in the previous month about FP were 3.3 times (men) and 1.9 times (women) more likely to report this outcome (p < .001). Among male respondents, those without any education were less likely than those who had complete primary education to

## TABLE 11FACTORS ASSOCIATED WITH THE LIKELIHOOD OF FEELING HIGHLY CONFIDENT THEY<br/>CAN TALK TO THEIR PARTNER ABOUT FP

	MALE RESPONDENTS (n = 1,211)		FEMALE RESPONDENTS (n = 1,241)	
	OR	95% CI	OR	95% CI
Frequency of CT radio spot recall				
At least once a day	.88	.54-1.43	2.31***	1.45-3.68
At least once a week	1.29	.83-2.01	1.28	.80–2.03
Less frequently	.97	.45-2.09	1.52	.69–3.36
Not at all	—	—	—	—
Time (data collection week)	.89***	.79–.90	.94*	.88–.99
Current use of FP	1.94***	1.45-2.61	1.56***	1.19–2.04
Talked to a health provider about FP in last month	3.32***	2.03-5.44	1.94***	1.39-2.70
Believe people in their community talk to their partner about FP	.83	.64-1.09	.88	.67–1.16
Age group				
18–24	_	_	_	_
25–34	1.43	.94–2.18	1.16	.84-1.61
35+	1.76*	1.07-2.90	1.20	.78–1.85
Married or living with someone as married	.78	.50-1.06	1.17	.86-1.58
Number of children				
0 child	—	—	_	—
1–2 children	1.25	.91–1.72	1.28	.93–1.76
3+ children	1.05	.68–1.62	.98	.62–1.54
Level of education				
None	.23*	.07–.74	.63	.33–1.20
Incomplete primary	.75	.38–1.46	.83	.44–1.56
Complete primary	—	—	—	—
Incomplete secondary	1.56	.98–2.49	.94	.62–1.42
Complete secondary	1.16	.71–1.89	1.43	.92-2.23
University	2.34***	1.46-3.75	2.00**	1.28-3.14

report high self-efficacy (OR = 0.23, p < .05), while those with university studies were more likely to report high self-efficacy (OR = 2.34, p < .001). Among women, those with university studies were twice as likely to report high self-efficacy compared to those with complete primary education (p < .01). Lastly, with each additional week of data collection, participants were less likely to report high self-efficacy (OR = .89 [men] and .94 [women], p < .001 and < .05 respectively).

Among male respondents only, those older than 35 were 1.8 times more likely than those 18 to 24 to report high self-efficacy to discuss FP with a partner, but no effect was observed by relationship status or number of children. Among women, we found no significant effect of age, relationship status, or number of children.

### **Behavioral intent**

## Factors associated with intent to communicate with partner about FP

Table 12 presents the factors associated with the likelihood of intending to communicate with a partner about FP in the coming month.

Among male respondents, exposure to Confiance Totale was not significantly associated with intent to communicate with a partner about FP. Variables related to current use of FP methods, perceived self-efficacy about spousal communication, descriptive social norms about spousal communication about FP, and sociodemographic characteristics such as age, relationship status, number of children, and education were all statistically associated with intent to communicate with a partner about FP. Each additional week of data collection significantly decreased the odds that a male respondent would report intent to communicate with a partner about FP (OR = .93, p < 0.01). Those currently using an FP method were over six times more likely to intend to communicate with their partner compared to those not using a method (OR = 5.74, p < 0.001). In addition, those who had talked with a health provider in the previous month were 1.5 times more likely to intend to communicate with a partner compared to those who had not talked with a provider (p < .05), while those reporting feeling highly confident that they could talk to their partner about FP were over four times more likely to report intent to communicate (p < .001). Lastly, male respondents who believed that people in their community talk with their partners about FP were more than twice as likely to also report intent to

communicate with their partners about FP in the coming month (p < .001). In terms of sociodemographic characteristics, those married or living with someone, those who had three or more children, those holding an incomplete secondary education, and those with a university education were more likely to report intent, compared to those not living with their partner, those who didn't have children, or those with a complete primary education (OR = 2.20, 1.84, 1.80, and 1.67 respectively). In contrast, male participants with an incomplete primary education were less likely to intend to talk with a partner compared to those with a complete primary education QR = 0.44, p < .05).

For female respondents, variables related to exposure to the radio campaign, time, current use of FP methods, and discussion with a health provider about FP, as well as relationship status, were significantly associated with the intent to talk about FP with a partner. Those recalling hearing the campaign at least once a day were 2.9 times more likely and those recalling hearing the campaign at least once a week were 2.5 times more likely to report intent to communicate with their partner in the coming month than those who did not recall the campaign (ps < .001 and < .01 respectively). Similar to male respondents, for each additional week of data collection, female respondents were less likely to intend to discuss FP with a partner (OR = 0.94, p < .05), and those currently using FP were more than six times more likely to intend to talk to their partner (OR = 6.49, p < .001). By the same token, female respondents who talked to a health provider about FP in the last month were more likely to report intent (OR = 2.40, p < .001), and those who felt highly confident that they could talk to their partners about FP were three times more likely to report intent to communicate with their partner (p < .001). Lastly, as observed in the case of male respondents, women who were married or living as such were more likely to intend to discuss FP (OR = 1.84, p < .001).

## Factors associated with intent to go to a health care facility to seek FP information in the next six months

For both male and female respondents, exposure to *Confiance Totale*, time, current use of FP, communication with partner, and communication with a health provider about FP in the last month were all significantly associated with intending to go to a health care facility to seek FP information in the next six months (Table 13). Among male respondents, compared to those who did not recall the campaign, those who recalled hearing it at least once

## TABLE 12FACTORS ASSOCIATED WITH THE LIKELIHOOD OF INTENDING TO COMMUNICATE WITH<br/>PARTNER ABOUT FP IN THE COMING MONTH

	MALE RESPONDENTS (n = 1,171)		FEMALE RE (n =	ESPONDENTS 1,182)
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	1.73	.86-3.48	2.89**	1.36-6.17
At least once a week	1.23	.69–2.18	2.47*	1.22-5.01
Less frequently	1.09	.47–2.55	5.69**	1.60-20.26
Not at all	—	_	—	—
Time (data collection week)	.93	.86–1.03	.94	.87–1.02
Current use of FP	5.74***	4.09-8.07	6.49***	4.70-8.95
Talked to a health provider about FP in last month	1.46	.71–2.99	2.40**	1.36-4.26
High confidence that they can talk to partner about FP	4.34***	3.05-6.20	3.19***	2.31-4.41
Believe people in their community talk to their partner about FP	2.08***	1.50-2.88	1.24	.88–1.74
Age group				
18–24	—	—	_	—
25–34	.89	.54–1.45	1.32	.88–1.99
35+	.50*	.28–.92	.87	.52–1.46
Married or living with someone as married	2.04***	1.35-3.11	1.88***	1.30-2.71
Number of children				
0 child	—	_	_	—
1–2 children	1.08	.70–1.67	.86	.57–1.28
3+ children	2.19*	1.20-3.99	.62	.36-1.07
Level of education				
None	.53	.21–1.37	1.42	.68–2.95
Incomplete primary	.42*	.2090	.68	.35-1.34
Complete primary	—	—	_	—
Incomplete secondary	1.54	.86-2.76	1.64	.98–2.75
Complete secondary	1.24	.68–2.24	1.49	.35-1.34
University	1.21	.68–2.18	1.43	.81–2.53

\*p<.05; \*\*p<.01; \*\*\*p<.001

a day were 3.4 times more likely to report intent to go to a health facility to seek FP information or care in the next six months (p < .001). Among female respondents, compared to those not recalling the campaign, those who recalled it at least once a day and at least once a week were over three times more likely to intend to go to a facility (OR = 3.9 and 3.1, p < .001 and < .01, respectively). For both men and women, time was negatively associated with the outcome. For each passing week, respondents were less likely to report intent to go to a facility (OR = 0.78 for men and 0.88 for women, p < .05). Also for both men and women, those who talked to their partners about FP in the previous month were more likely to report intent to go to a facility to seek FP information in the following six months (OR = 2.2, p < .001), as were those who had talked to a health provider in the previous month (OR = 2.04 [men] and 1.78 [women], p < .05).

Sociodemographic characteristics significantly affecting the odds of reporting intent to go to a health care facility differed by sex. Among male respondents, those with an incomplete secondary education were almost twice as likely to report intent to go to a health care facility in the next six months compared to those with a complete primary education (OR = 1.9, p < .01). Among female respondents, both relationship status and number of children were significantly associated with the outcome. Those married or living as such were 1.5 times more

## TABLE 13FACTORS ASSOCIATED WITH THE LIKELIHOOD OF INTENDING TO GO TO A HEALTH CARE<br/>FACILITY TO SEEK FP INFORMATION IN THE NEXT SIX MONTHS

	MALE RESPONDENTS (n = 1,136)		FEMALE RE (n =	SPONDENTS 1,116)
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	3.43***	1.80-6.53	3.93***	1.81-8.54
At least once a week	1.18	.74–1.89	3.13**	1.41-6.95
Less frequently	.90	.38–2.16	1.66	.72–3.86
Not at all	_	_	_	_
Time (data collection week)	.78***	.73–.85	.88***	.81–.95
Current use of FP	1.94***	1.40-2.67	3.22***	2.31-4.47
Talked to partner about FP in last month	2.19***	1.62-2.96	2.22***	1.58-3.11
Talked to a health provider about FP in last month	2.04*	.121-3.71	1.78*	1.10-2.86
Believe health centers provide trustworthy FP services	1.53	.85–2.75	1.81	.89–3.70
Believe people in their community would approve of FP use	1.05	.73–1.52	1.16	.79–1.70
Agree that FP methods are effective to delay or avoid pregnancy	1.29	.70–2.39	1.12	.58–2.15
Agree that using FP is safe	1.24	.83–1.87	1.45	.95-2.20
Agree that using FP is important to delay or avoid pregnancy	1.28	.59–2.79	1.65	.52–5.25
Age group				
18–24	—	_	_	_
25–34	.81	.51-1.30	.88	.58-1.34
35+	.60	.35-1.04	.76	.45-1.28
Married or living with someone as married	1.17	.82–1.66	1.47*	1.00-2.14
Number of children				
0 child	—	_	_	—
1–2 children	1.07	.75–1.53	.62*	.42–.91
3+ children	.99	.61–1.60	.50*	.29–.86
Level of education				
None	.82	.36-1.90	1.77	.83-3.77
Incomplete primary	.85	.40-1.81	1.12	.57–2.18
Complete primary	—	_		_
Incomplete secondary	1.91**	1.18-3.11	1.53	.91–2.56
Complete secondary	1.60	.96–2.67	1.18	.67–2.07
University	1.26	.78–2.04	1.68	.94-3.03

\*p<.05; \*\*p<.01; \*\*\*p<.001

likely than those who were not to report intent to go to a facility to seek FP information in the next six months (p < .05), and those with three or more children were half as likely to report intent than those who had no children (p < .05).

## Factors associated with intent to use FP in the next six months

Table 14 presents factors associated with the likelihood of intending to use FP in the next six months among those not currently using an FP method. Notably, recall of *Confiance Totale* exposure was not significantly associated with this outcome for either male or female respondents. Time was once again significantly associated with this outcome for both sexes. For each additional week of data collection, respondents were less likely to report intent to use FP (OR = 0.69 [men] and 0.83 [women], p < .01). Interestingly, for male responders, talking to a health provider about FP in the previous month was significantly associated with intent to use FP (OR = 4.96, p < .05), while for female respondents, talking to their partner about FP in the previous month increased their likelihood to report intent to use FP (OR = 2.76, p < .01). For both male and female participants, age was significantly associated with intent to use FP, with those over the age of 35 significantly less likely to report intent compared to those 18 to 24 years old (OR = 0.29 and 0.32respectively, p < .05).

Male participants who have one or two children were almost three times more likely to intend to use FP compared to those who do not have children (OR = 2.9, p < .05). Among women only, those who reached a complete

## TABLE 14FACTORS ASSOCIATED WITH THE LIKELIHOOD OF INTENDING TO USE FP IN THE NEXT<br/>SIX MONTHS AMONG NONUSERS

	MALE RESPONDENTS (n = 289)		FEMALE RE (n =	ESPONDENTS = 359)
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	1.17	.31-4.37	1.09	.25-4.73
At least once a week	.59	.25–1.38	.43	.15–1.23
Less frequently	1.34	.36–5.07	.59	.10-3.39
Not at all	—	—	—	—
Time (data collection week)	.69***	.59–.81	.83**	.74–.94
Talked to a health provider about FP in last month	4.96*	1.30-18.85	2.03	.88-4.69
Has talked to partner about FP in last month	2.11	.99-4.48	2.76**	1.42-5.39
Believe people in their community would approve of FP use	1.20	.66–2.20	1.04	.59–1.81
Agree that FP methods are effective to delay or avoid pregnancy	.90	.33–2.41	.73	.34–1.58
Agree that using FP is safe	1.30	.66–2.56	1.09	.61–1.94
Agree that using FP is important to delay or avoid pregnancy	3.02	.99-9.22	.73	.28–1.90
Age group				
18–24	—	—	—	—
25–34	.56	.24–1.29	.75	.40-1.44
35+	.32*	.12–.87	.29**	.12–.69
Married or living with someone as married	1.07	.55–2.09	.96	.52–1.77
Number of children				
0 child	—	—	_	—
1–2 children	2.82**	1.41–5.67	1.85	.95-3.58
3+ children	1.33	.53–3.35	1.99	.79–4.99
Level of education				
None	1	(empty)	2.26	.64-7.91
Incomplete primary	.75	.20–2.89	0.99	2.72-3.60
Complete primary	—	—	_	—
Incomplete secondary	1.13	.39-3.28	2.38	.86-6.55
Complete secondary	1.42	.48-4.26	3.36*	1.16-9.71
University	1.57	.56-4.39	4.16**	1.49–11.58

secondary or university education were more likely to intend to use FP (OR = 3.36, 4.05 respectively; p < .05).

#### **Behavioral outcomes**

## Factors associated with communication about FP with health care provider in last month

Table 15 presents factors associated with the likelihood of communicating with a health provider about FP in the previous month. Among both male and female participants, recalled exposure to *Confiance Totale* was significantly associated with this outcome. Compared to those who did not recall hearing the campaign in the last month, men and women who recalled hearing the campaign at least once a day were respectively 2.9 and 2.5 times more likely to have talked to a health provider in the previous month (p < .001), and men who had heard the campaign at least once a week were almost twice as likely as men who had not heard the campaign to have spoken to a provider (p < .05). Both men and women who had talked to their partners about FP in the last month were more likely to report that they had also talked to a provider about FP in the last month compared to those who had not talked to their partner about FP (OR = 2.39 and 3.84 respectively, p < .001). Similarly, compared to respondents that did not have children, men who had more than three children and women who had one or

## TABLE 15FACTORS ASSOCIATED WITH THE LIKELIHOOD OF COMMUNICATING WITH A HEALTH<br/>CARE PROVIDER ABOUT FP IN THE LAST MONTH

	MALE RE (n =	MALE RESPONDENTS (n = 1,273)		ESPONDENTS = 1,290)
	ODDS RATIO	95% CI	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	2.94***	1.74-4.97	2.51***	1.58-4.01
At least once a week	1.90*	1.06-3.43	1.62	.89–2.96
Less frequently	1.09	.25-4.72	.69	.22–.215
Not at all	-	-	-	-
Time (data collection week)	.92	.82–1.02	.95	.87–1.04
Current use of FP	.91	.52–1.60	1.68*	1.06-2.66
Believe that health centers provide trustworthy FP services	1.14	.53–2.47	.89	.42-1.90
Has talked to partner about FP in last month	2.39***	1.51–3.78	3.84***	2.66-5.54
Age group				
18–24	_	_	_	
25–34	1.38	.63-3.01	.77	.49–1.23
35+	.85	.35–2.06	.93	.51-1.70
Married or living with someone as married	.92	.54–1.57	.97	.63–1.49
Number of children				
0 child	_	_	_	_
1–2 children	1.44	.82–2.55	1.87 **	1.21-2.90
3+ children	2.48*	1.19-5.17	1.40	.73–2.67
Level of education				
None	2.37	.62-9.10	3.03 **	1.47-6.23
Incomplete primary	1.03	.29-3.68	1.27	.50-3.20
Complete primary	-	-	-	-
Incomplete secondary	1.28	.54-3.01	.88	.47–1.66
Complete secondary	1.20	.50-2.86	1.25	.66–2.38
University	1.50	.64–3.50	1.60	.83-3.10

two children were more likely to have talked to a provider about FP in the past month (OR = 2.48 and 1.87 respectively, p < .05).

For female respondents alone, those who were using an FP method were more likely to have talked to a health provider (OR = 1.69, p < .05). Likewise, female respondents who did not have any education were more likely to have talked to a health care provider compared to those who had a complete primary education (OR = 3.03, p < .01).

## Factors associated with current use of modern FP methods

Table 16 shows the factors associated with the likelihood that respondents were currently using FP. Notably, controlling for sociodemographic and ideational factors, for both men and women recall of the *Confiance Totale* campaign was significantly associated with current use of contraception. Men and women who recalled hearing a campaign radio spot at least once a day were twice as likely (men) and 2.9 times more likely (women) to report

#### TABLE 16 FACTORS ASSOCIATED WITH THE LIKELIHOOD OF CURRENT USE OF FP

	MALE RESPONDENTS (n = 1,133)		FEMALE RE (n =	SPONDENTS 1,151)
	ODDS RATIO	95% Cl	ODDS RATIO	95% CI
Frequency of CT radio spot recall				
At least once a day	1.96*	1.02-3.77	2.92**	1.51-5.65
At least once a week	.80	.47-1.33	1.46	.76–2.81
Less frequently	.95	.41-2.21	1.66	.62-4.41
Not at all	—	—	_	—
Time (data collection week)	1.10*	1.01-1.20	1.09*	1.01-1.19
Has talked to partner about FP in last month	3.78***	2.66-5.36	4.29***	3.01-6.13
Believe people in their community would approve of FP use	1.70**	1.11-2.62	2.14***	1.37–3.34
Believe other people in their community use FP	2.18***	1.46-3.28	1.89*	1.16-3.06
Agree that FP methods are effective to delay or avoid pregnancy	.80	.41–1.57	1.79	.92–3.50
Agree that using FP is safe	2.06***	1.35-3.15	1.32	.86–2.03
Agree that using FP is important to delay or avoid pregnancy	2.97*	1.30-6.80	7.38**	1.75–31.16
Age group				
18–24	_	_	_	—
25–34	.87	.50-1.50	1.04	.70–1.55
35+	.63	.33–1.19	.44**	.26–.74
Married or living with someone as married	1.07	.72–1.58	1.91**	1.29–2.84
Has children				
0 child	_	_	_	—
1–2 children	1.09	.71–1.67	1.16	.76–1.77
3+ children	.79	.49–1.38	.78	.44-1.37
Level of education				
None	1.86	.68–5.12	.89	.42-1.92
Incomplete primary	.38*	.17–.86	.92	.43–1.96
Complete primary	_	_	_	—
Incomplete secondary	1.70	.95-3.05	1.44	.86-2.42
Complete secondary	1.41	.78–2.55	1.73	.98-3.06
University	1.06	.60–1.87	.87	.49–1.54

currently using FP compared to those who did not recall the campaign (p < .05, < .01 respectively).

Controlling for all factors and campaign recall, for every additional week of data collection, male respondents were 10% more likely and women were 9% more likely to report current use of contraception than respondents in the previous week (p < .05). Other significant factors shared among male and female respondents included spousal communication (OR = 3.78 and 4.29 respectively, p < .001); belief that others in the community would approve of FP use (OR = 1.7 and 2.14 respectively, p < .001); belief that other people in the community use FP (OR = 2.18, 1.89; p < .001, < .05, respectively), and belief that FP is important to delay or avoid pregnancy (OR = 2.97, 7.38; p < .05, < .01, respectively).

Interestingly, attitudes about method safety were only significantly related to FP use among male respondents (OR = 2.06, p < .001). Age and relationship status were only significant factors among women, while education was significantly associated with the outcome among men only. Women over 35 years old were less likely than those 18 to 24 to be currently using FP (OR = 4.4,

p < .001), and those married or living with someone were 1.9 times more likely than those who were not to be currently using FP (p < .01). Lastly, men holding an incomplete primary education were less likely to be currently using FP compared to those with complete primary education (OR = 0.38, p < .05).

### Summary of associations with the *Confiance Totale* campaign

Table 17 summarizes significant associations between dependent variables and recall of *Confiance Totale*, explored in multivariate analyses, by sex. See Annex C for a summary of all significant associations.

#### TABLE 17 SUMMARY OF ASSOCIATION OF UNPROMPTED RECALL OF CONFIANCE TOTALE EXPOSURE AND KEY IDEATIONAL AND BEHAVIOR OUTCOMES, BY SEX (√ = SIGNIFICANT ASSOCIATION, X = NOT SIGNIFICANT)

DEPENDENT VARIABLE	DEPENDENT VARIABLE	RECALL OF CONFIANCE TOTALE		
DOMAIN		MALE	FEMALE	
Cognitive Ideation	Attitudes about FP safety	$\checkmark$	$\checkmark$	
	Descriptive social norms surrounding spousal communication about FP	×	×	
Social Ideation	Descriptive social norms surrounding use of FP	×	×	
	Injunctive social norms surrounding use of FP	×	×	
	Spousal communication about FP	×	$\checkmark$	
Emotional Ideation	High perceived self-efficacy to communicate with partner about FP	×	$\checkmark$	
	Intent to communicate with partner about FP	×	$\checkmark$	
Behavioral Intent	Intent to go to health facility to seek FP information	$\checkmark$	$\checkmark$	
	Intent to use FP	×	×	
Pahaviaral Outcom	Communicated with health provider in previous month	$\checkmark$	$\checkmark$	
Denavioral Outcome	Current use of FP	$\checkmark$	$\checkmark$	

## Discussion

This technical report presents results from mobile phone-based monitoring surveys aimed at measuring unprompted recall of exposure to the Confiance Totale quality assurance branding campaign in three districts of Abidjan, Côte d'Ivoire, as well as ideational factors that determine FP use, such as attitudes about FP, social norms, perceived self-efficacy related to spousal communication, and behavioral intent to seek FP information and use it. It is worthy of note that this campaign and the monitoring surveys ran entirely during the COVID-19 pandemic, a period of more restricted mobility and increased public health precautions. Campaign messages were tailored to primarily encourage spousal communication about FP and promoted safe and effective FP methods and trustworthy FP services. Radio spots that were adapted specifically to the COVID-19 context also included mention of FP methods that can be accessed through pharmacies as well as taking stock of methods at home to avoid running out.

It is noteworthy that the monitoring surveys showed much lower levels of recall than expected based on the Saturation+ approach (at least 60%). This study measured unprompted recall only, as we were unable to incorporate an audio clip of the campaign in the CADI platform to measure prompted campaign recall. Inclusion of an audio prompt may have significantly increased levels of campaign recall. Another more contextual explanation of lower-than-expected campaign recall could possibly be related to the period of electoral unrest the country experienced, with raised tensions extending weeks prior to the 31 October elections and potentially drawing people's attention away from other messages in the media.

Descriptive analyses showed that radio listenership was skewed male, with about a third of female participants reporting not listening to the radio at all. This survey used a single question to assess radio listenership and did not explore in detail all possible ways both men and women may be exposed to radio and radio spots, which include in businesses and public spaces such as taxis and public transportation, markets, beauty salons, and other venues. However, this finding calls into question the appropriateness of a single-channel approach, particularly to reach women of reproductive age. Monitoring data also showed a very high proportion of people that already hold positive attitudes toward FP, thinking it is safe, effective, and important and that health centers provide trustworthy FP services. We also observed relatively high levels of reported self-efficacy to communicate with a partner and supportive social norms around spousal communication. For some ideational factors, such as descriptive social norms about FP use (among female respondents) and self-efficacy to discuss FP with a partner, the high proportion of respondents reporting FP-supportive ideations may in part be a consequence of respondents' relatively high level of education. However, we also observed a gap between these ideational factors and lower levels of reported FP-related behavior. We do not have other sources of data to compare these ideational factors against, since other large-scale representative surveys such as DHS or PMA do not include ideational measures.

Multivariate analyses show that recall of the Confiance Totale campaign was significantly associated with some ideational outcomes among both male and female respondents, notably perceptions of FP safety and intent to go to a health facility to seek FP information in the subsequent six months. Among female respondents only, the campaign was also associated with spousal communication in the previous month, perceived self-efficacy to communicate with a partner, and intent to communicate with a partner. Campaign recall was also significantly associated with the two main behavioral outcomes among both sexes: talking to a health provider about FP and current use of FP. Most significant effects associated with the campaign occurred between the two extreme exposure categories (no recall of the campaign versus recall of daily exposure). Although these findings may be indicative of the potential role a radio campaign may have in shifting these key determinants of FP use, we are unable to definitively conclude that campaign exposure leads to improvement in these ideational factors and behavioral outcomes. Respondents who were reporting the outcomes may have a higher likelihood of remembering campaign exposure (see Limitations below). On the other hand, campaign recall was not associated with targeted ideational factors such as positive attitudes about FP effectiveness, importance, and descriptive or

injunctive social norms. As mentioned above, weighted point estimates already show a high level of belief that FP methods are effective and important; thus, campaign efforts may be better placed in reinforcing other FP-supportive ideational factors such as descriptive and injunctive social norms.

Controlling for campaign exposure, we observed statistically significant trends (as captured by the time variable). First, we observed a rising trend throughout the data collection period, among male respondents only, in indicators such as attitudes about FP safety, descriptive social norms about spousal communication, and FP use and, among male and female respondents, a rising trend in spousal communication about FP and current use of FP. Reasons for this rising trend among participants may include exposure to other programming or campaigns promoting FP use through similar ideational determinants. On the other hand, we observed negative time trends among both men and women for perceived self-efficacy, intent to go to a facility, and intent to use FP in the subsequent six months. Speculatively, negative trends across time could in part be related to ongoing COVID-19 restrictions or other contextual factors, with target populations' attention distracted from FP.

Other notable results are drawn from multivariate analyses. Among men, relationship status (being married or living as married) arose as a significant factor associated with descriptive social norms around FP communication and use in their community. This may indicate that men are most attuned to FP-related social norms when they enter long-term relationships, regardless of age. Campaigns can purposefully target unmarried men to highlight the relevance and importance of FP use and promote FP as a concern for both sexes in nonpermanent relationships. On the other hand, older women (over 35 years of age) were less likely to intend to use FP or be currently using it at the time of the survey. Future campaigns must continue to target women nearing the end of their reproductive life, as they represent an audience that is particularly vulnerable to unintended pregnancy. Interestingly, among male respondents, communication with a health provider in the previous month was associated with intent to use FP, whereas for female respondents, spousal communication was associated with intent to use FP. Lastly, attitudes about FP safety were associated with FP use among male respondents but not female respondents. Future campaigns should note the potential need to particularly reassure male audiences about FP safety.

This study has important limitations. Due to the COVID-19 pandemic and restrictions on face-to-face data collection, this study drew data from mobile phone surveys.<sup>18</sup> Multiple sources of potential bias are introduced when using mobile phone surveys. First, there are marked differences between mobile phone owners and those who do not own a mobile phone. Surveys conducted via mobile phones are more likely to reach male, urban, and more educated respondents. Second, as described in the methodology, this study used a database of mobile phone numbers from one carrier in Côte d'Ivoire (MTN). We do not know if there are notable differences between MTN and other carriers present in Côte d'Ivoire in terms of their users. Third, among those reached by the survey, there may be unmeasured differences between those who choose to respond to the survey versus those who do not (response bias). Mobile phone surveys typically have lower response rates than traditional face-to-face surveys, as was the case in this study. We have attempted to address these biases by (1) stratifying the sample by sex to oversample women, given that women have lower phone ownership rates than men, and (2) using post sampling weights to calculate point estimates reflective of the target population's age and education profile. Nonetheless, weighted point estimates based on these two sociodemographic variables do not eliminate potential for bias, thus limiting the generalizability of our findings. Other biases that are common to self-reported behavioral surveys, regardless of the modality, include recall bias and social desirability bias.

Lastly, this monitoring study was conducted only in campaign implementation areas in the capital city's metropolitan area. Without data from control areas in other urban centers, these data do not allow us to establish robust causal relationships between the campaign exposure and recall and FP-related ideational and behavioral outcomes. Observed associations between campaign recall and explored outcomes may be explained by a higher likelihood to notice and recall a campaign among those who already have supportive FP ideation and are using FP methods, as they may be primed to respond to messages they relate to.

## Conclusion

Radio campaigns and other mass media approaches have been shown to be cost-effective, high-impact practices in promoting FP awareness, related ideations, and use.<sup>18</sup> Confiance Totale, a quality assurance branding campaign broadcast via community and commercial radio stations in the Abidjan region of Côte d'Ivoire, used an evidence-based method called Saturation+ to ensure high saturation of campaign messages. Radio spots were broadcast at least six times per three local languages per day by all participating radio stations. This monitoring study showed campaign recall at lower levels than expected with such an approach, yet found significant associations, particularly among women, between campaign recall and FP-supportive ideational factors targeted by the campaign such as FP-related spousal communication. Although encouraging, these findings should be interpreted with caution, given the inherent limitations of mobile phone surveys. Future FP campaigns in Abidjan should consider a multichannel approach, particularly to reach women of reproductive age, who have lower radio listenership than men, and should specifically target women nearing the end of their reproductive life, as they represent an audience particularly vulnerable to unintended pregnancies. Campaigns may also consider prioritizing messages addressing descriptive and injunctive social norms around FP, as this study observed there are already high levels of FP-positive attitudes, and greater gains can yet be achieved in shifting social norms towards a more FP supportive environment.

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## Annex A: Questionnaire

#	QUESTION
1	How old are you?
2	What province do you live in?
3	What district do you live in?
4	Sex of respondent 1) MALE 2) FEMALE 3) DON'T KNOW 4) REFUSED
5	How often do you listen to the radio? 1) Every day 2) Two or three times a week 3) Once a week 4) Less often 5) Not at all 6) DON'T KNOW 7) REFUSED
6	Are you married or living with someone as married? 1) YES 2) NO 3) DON'T KNOW 4) REFUSED
7	What was the highest level of education you completed? 1) INCOMPLETE PRIMARY 2) COMPLETE PRIMARY 3) INCOMPLETE SECONDARY 4) COMPLETE SECONDARY 5) UNIVERSITY 6) NONE 7) DON'T KNOW 8) REFUSED
8	Do you have any children? 1) YES 2) NO 3) DON'T KNOW 4) REFUSED
9	How many children do you have?
10	<ul> <li>Where in your community would a person be able to get family planning methods?</li> <li>1) HEALTHCARE FACILITY</li> <li>2) PHARMACY</li> <li>3) SUPERMARKET / CONVENIENCE SHOP</li> <li>4) STREET MARKET</li> <li>5) FAMILY / FRIEND / ACQUAINTANCE</li> <li>6) Other [specify]</li> <li>7) DON'T KNOW</li> <li>8) REFUSED</li> </ul>
11	To what extent do you agree or disagree with the following statement: "It is important to use family planning methods for spacing or limiting pregnancies"? 1) Completely agree 2) Agree 3) Disagree 4) Completely disagree 5) DON'T KNOW 6) REFUSED

12	To what extent do you agree or disagree with the following statement: "In general, family planning methods are safe to use to delay or limit pregnancies"? 1) Completely agree 2) Agree 3) Disagree 4) Completely disagree 5) DON'T KNOW 6) REFUSED
13	To what extent do you agree or disagree with the following statement: "In general, family planning methods are effective to delay or limit pregnancies"? 1) Completely agree 2) Agree 3) Disagree 4) Completely disagree 5) DON'T KNOW 6) REFUSED
14	To what extent do agree or disagree with the following statement: "health centers provide trustworthy family planning services"? 1) Completely agree 3) Disagree 4) Completely disagree 5) DON'T KNOW 6) REFUSED
15	In general, do you believe that partners in your community talk to each other about family planning? 1) NO 2) YES 3) DON'T KNOW 4) REFUSED
16	In general, do you believe that couples in your community use contraception to space or limit births? 1) NO 2) YES 3) DON'T KNOW 4) REFUSED
17	In general, would people in your community approve or disapprove of a couple who uses contraception to space or limit pregnan- cies? 1) DISAPPROVE 2) APPROVE 3) DON'T KNOW 4) REFUSED
18	In the last month, have you talked about family planning with your partner? 1) NO 2) YES 3) NO- you don't have a partner 4) DON'T KNOW 5) REFUSED
19	In the coming month, do you intend to talk about family planning with your partner? 1) NO 2) YES 3) DON'T KNOW 4) REFUSED
20	How confident are you that you can talk to your partner about family planning? 1) Highly confident 2) Moderately confident 3) Slightly confident 4) Not confident 5) DON'T KNOW 6) REFUSED

21	In the last month, have you talked about family planning with a healthcare provider (either in person or by phone) ? 1) NO 2) YES 3) DON'T KNOW 4) REFUSED
22	Are you or your partner currently doing something or using a method to delay or avoid pregnancy? 1) NO 2) YES 3) Currently pregnant 4) DON'T KNOW 5) REFUSED
23	What method(s) are you using? 1) FEMALE STERILIZATION 2) MALE STERILIZATION 3) IUD 4) INJECTABLES 5) IMPLANT 6) PILL 7) MALE CONDOM 8) FEMALE CONDOM 9) LAM 10) RHYTHM METHOD 11) WITHDRAWAL 12) Other [specify] 13) DON'T KNOW 14) REFUSED
24	Do you intend for you or your partner to use family planning to space or limit pregnancies in the next six months? 1) NO 2) YES 3) DON'T KNOW 4) REFUSED
25	Do you intend to go to a healthcare facility to seek information about family planning in the next six months? 1) NO 2) YES 3) DON'T KNOW 4) REFUSED
26	In the last month, have you heard radio spots for the brand Confiance Totale? 1) NO 2) YES 3) DON'T KNOW 4) REFUSED
27	How many times would you say you have heard radio spots for the brand Confiance Totale in the last month? 1) Several times a day 2) About once a day 3) Several times a week 4) About once a week 5) Less frequently than once a week 6) DON'T KNOW 7) REFUSED

## Annex B: Calculation of Post Sampling Weights

#### SEX DISAGGREGATED WEIGHTS BY AGE AND EDUCATION

	EDS * ABIDJAN ONLY	UNWEIGHTED STUDY DATA -WAVE 1	WAVE 1 WEIGHTS	UNWEIGHTED STUDY DATA - WAVE2	WAVE 2 WEIGHTS	UNWEIGHTED STUDY DATA - WAVE3	WAVE 3 WEIGHTS
	(111)	(11)	(111/11)	(IV)	(III/IV)	(V)	(III/V)
Male*Education*Age							
Complete primary							
18–24	22.370	5.130	4.361	5.560	4.023	9.300	2.405
25–34	31.580	58.970	0.536	55.560	0.568	39.530	0.799
35+	40.790	35.900	1.136	38.890	1.049	51.160	0.797
Complete secondary							
18-24	29.760	16.940	1.757	18.180	1.637	25.260	1.178
25-34	34.520	54.840	0.629	54.550	0.633	47.370	0.729
35+	33.330	28.230	1.181	27.270	1.222	27.370	1.218
Incomplete primary							
18–24	30.260	15.220	1.988	21.430	1.412	8.700	3.478
25-34	38.160	45.650	0.836	42.860	0.890	34.780	1.097
35+	25.000	39.130	0.639	35.710	0.700	56.520	0.442
Incomplete secondary							
18-24	32.350	16.440	1.968	17.040	1.898	9.840	3.288
25-34	22.060	50.000	0.441	47.410	0.465	48.090	0.459
35+	25.490	33.560	0.760	35.560	0.717	42.080	0.606
None							
18–24	16.780	10.000	1.678	16.670	1.007	18.180	0.923
25–34	35.570	50.000	0.711	66.670	0.534	36.360	0.978
35+	42.950	40.000	1.074	16.670	2.576	45.450	0.945
University							
18-24	25.510	13.770	1.853	20.000	1.276	5.520	4.621
25–34	51.020	55.070	0.926	49.410	1.033	66.900	0.763
35+	23.470	31.160	0.753	30.590	0.767	27.590	0.851
Female*Education*Age							
Complete primary							
18–24	20.140	19.050	1.057	18.000	1.119	16.670	1.208
25-34	37.500	38.100	0.984	44.000	0.852	52.380	0.716
35+	34.030	42.860	0.794	38.000	0.896	30.950	1.100

Complete secondary							
18–24	57.690	32.460	1.777	31.250	1.846	26.050	2.215
25–34	26.920	46.490	0.579	55.470	0.485	50.420	0.534
35+	12.820	21.050	0.609	13.280	0.965	23.530	0.545
Incomplete primary							
18–24	31.470	6.900	4.561	43.750	0.719	12.500	2.518
25–34	35.340	48.280	0.732	31.250	1.131	50.000	0.707
35+	19.830	44.830	0.442	25.000	0.793	37.500	0.529
Incomplete secondary							
18-24	29.720	26.530	1.120	30.410	0.977	27.740	1.071
25-34	28.480	42.180	0.675	43.270	0.658	43.230	0.659
35+	17.030	31.290	0.544	26.320	0.647	29.030	0.587
None							
18–24	26.600	3.700	7.189	13.640	1.950	27.500	0.967
25–34	36.000	37.040	0.972	36.360	0.990	37.500	0.960
35+	27.600	59.260	0.466	50.000	0.552	35.000	0.789
University							
18-24	31.710	26.280	1.207	28.160	1.126	18.630	1.702
25-34	47.970	52.550	0.913	57.280	0.837	60.780	0.789
35+	20.330	21.170	0.960	14.560	1.396	20.590	0.987

# Annex C: Synthesis of Multivariate Associations

Factors highlighted in green reflect a positive association (i.e. respondents reflected in the independent variable have higher odds of the dependent variable), and factors highlighted in orange reflect a negative association (i.e. respondents reflected in the independent variable have a lower odds of the dependent variable).

DEPENDENT VARIABLE DOMAIN	DEPENDENT VARIABLE	INDEPENDENT VARIABLES (MALE)	INDEPENDENT VARIABLES (FEMALE)
Cognitive Ideation	Attitudes about FP safety	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Communicated with health provider in last month</li> <li>Reflects favorable descriptive social norms about use of FP</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Communicated with health provider in last month</li> <li>Reflects favorable descriptive social norms about use of FP</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>
Social Ideation	Descriptive social norms surround- ing spousal communication about FP	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>
	Descriptive social norms surround- ing use of FP	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>

	Injunctive social norms surround- ing use of FP	• Unprompted recall of Confiance Totale	Unprompted recall of Confiance Totale
		exposure	exposure
		<ul> <li>Time (each additional week of data collection)</li> </ul>	<ul> <li>Time (each additional week of data collection)</li> </ul>
		• Current use of FP	Current use of FP
		• Communicated with health provider in last month	• Communicated with health provider in last month
		• Spousal communication about FP	• Spousal communication about FP
		• Age	• Age
		• Education	• Education
		Relationship status	Relationship status
Social Ideation (continued)		<ul> <li>Number of children</li> </ul>	Number of children
	Spousal commu- nication about FP	• Unprompted recall of Confiance Totale exposure	Unprompted recall of Confiance Totale     exposure
		<ul> <li>Time (each additional week of data collection)</li> </ul>	<ul> <li>Time (each additional week of data collection)</li> </ul>
		• Current use of FP	• Current use of FP
		• Communicated with health provider in last month	• Communicated with health provider in last month
		• High perceived self-efficacy to commu- nicate with partner about FP	• High perceived self-efficacy to commu- nicate with partner about FP
		• Descriptive social norms about spousal communication	• Descriptive social norms about spousal communication
		• Age	• Age
		• Education	Education
		Relationship status	Relationship status
		<ul> <li>Number of children</li> </ul>	Number of children
Emotional Ide- ation	High perceived self-efficacy to communicate with partner about FP	• Unprompted recall of Confiance Totale exposure	• Unprompted recall of Confiance Totale exposure
		<ul> <li>Time (each additional week of data collection)</li> </ul>	<ul> <li>Time (each additional week of data collection)</li> </ul>
		• Current use of FP	• Current use of FP
		• Communicated with health provider in last month	• Communicated with health provider in last month
		• Descriptive social norms about spousal communication	• Descriptive social norms about spousal communication
		• Age	Age
		• Education	Education
		• Relationship status	Relationship status
		<ul> <li>Number of children</li> </ul>	Number of children

Behavioral Intent	Intent to com- municate with partner about FP	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>High perceived self-efficacy to communicate with partner about FP</li> <li>Descriptive social norms about spousal communication</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>High perceived self-efficacy to communicate with partner about FP</li> <li>Descriptive social norms about spousal communication</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>
	Intent to go to health facility to seek FP informa- tion	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Favorable attitudes towards health facility</li> <li>Spousal communication about FP</li> <li>Reflects favorable descriptive social norms about use of FP</li> <li>Favorable attitudes about FP safety, effectiveness, and importance</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Current use of FP</li> <li>Communicated with health provider in last month</li> <li>Favorable attitudes towards health facility</li> <li>Spousal communication about FP</li> <li>Reflects favorable descriptive social norms about use of FP</li> <li>Favorable attitudes about FP safety, effectiveness, and importance</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>
	Intent to use FP	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> <li>Reflects favorable descriptive social norms about use of FP</li> <li>Favorable attitudes about FP safety, effectiveness, and importance</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>	<ul> <li>Unprompted recall of Confiance Totale exposure</li> <li>Time (each additional week of data collection)</li> <li>Communicated with health provider in last month</li> <li>Spousal communication about FP</li> <li>Reflects favorable descriptive social norms about use of FP</li> <li>Favorable attitudes about FP safety, effectiveness, and importance</li> <li>Age</li> <li>Education</li> <li>Relationship status</li> <li>Number of children</li> </ul>

	Communicated with health pro- vider in previous month	<ul> <li>Unprompted recall of Confiance Totale exposure</li> </ul>	<ul> <li>Unprompted recall of Confiance Totale exposure</li> </ul>
		• Time (each additional week of data collection)	• Time (each additional week of data collection)
		• Current use of FP	• Current use of FP
		<ul> <li>Favorable attitudes towards health facility</li> </ul>	<ul> <li>Favorable attitudes towards health facility</li> </ul>
		<ul> <li>Spousal communication about FP</li> </ul>	<ul> <li>Spousal communication about FP</li> </ul>
		• Age	• Age
		• Education	• Education
		<ul> <li>Relationship status</li> </ul>	<ul> <li>Relationship status</li> </ul>
Behavioral Outcome		Number of children	<ul> <li>Number of children</li> </ul>
	Current use of FP	• Unprompted recall of Confiance Totale exposure	<ul> <li>Unprompted recall of Confiance Totale exposure</li> </ul>
		<ul> <li>Time (each additional week of data collection)</li> </ul>	<ul> <li>Time (each additional week of data collection)</li> </ul>
		<ul> <li>Spousal communication about FP</li> </ul>	<ul> <li>Spousal communication about FP</li> </ul>
		• Reflects favorable descriptive and injunctive social norms surrounding use of FP	<ul> <li>Reflects favorable descriptive and injunctive social norms surrounding use of FP</li> </ul>
		• Favorable attitudes about FP safety	• Favorable attitudes about FP safety
		<ul> <li>Favorable attitudes about FP effectiveness</li> </ul>	<ul> <li>Favorable attitudes about FP effectiveness</li> </ul>
		<ul> <li>Favorable attitudes about importance of FP</li> </ul>	• Favorable attitudes about importance of FP
		• Age	• Age
		• Education	• Education
		Relationship status	<ul> <li>Relationship status</li> </ul>
		<ul> <li>Number of children</li> </ul>	<ul> <li>Number of children</li> </ul>

#### **Population Council**

4301 Connecticut Ave., NW | Suite 280 Washington, DC 20008 +1 202 237 9400 breakthroughactionandresearch.org