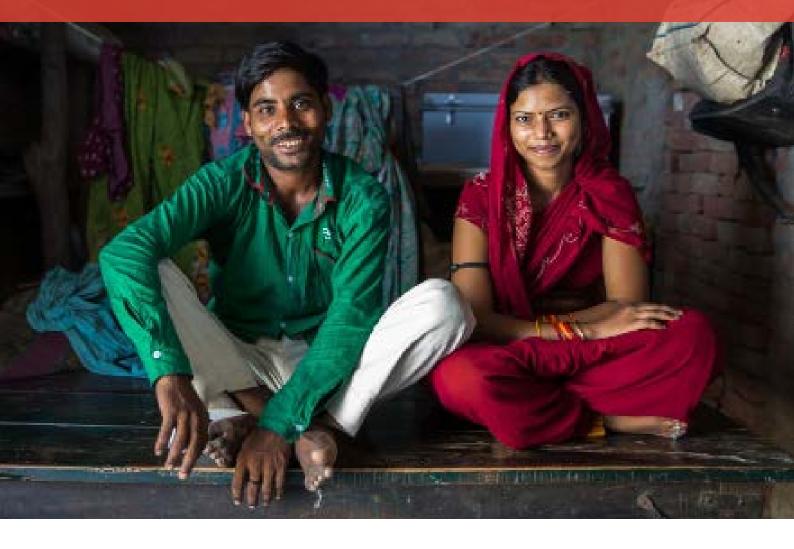
YUVAA SEGMENTATION REPORT

Camber Collective, in collaboration with Pathfinder International, is proud to present the results of the Youth Voices for Agency and Access (YUVAA) segmentation analysis of Young Married Couples in India. The YUVAA project is focused on promoting genuine choice and supporting young married couples and first-time parents in the decisions they make before, during, and after their first birth. To that end, this report shares the results and recommendations from Camber's quantitative segmentation analysis. It provides a nuanced understanding of the overall family planning dynamics of young married couples in India including detailed archetypes of five distinct subgroups of men and women for whom to design solutions and services. Our hope is that the insights within this document will help bring a new and nuanced understanding to how best to meet the needs of young couples and that the guidance we provide will be used by all implementors interested in serving this population in a customized, effective, and impactful way.

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MULLENLOWE LINTAS GROUP



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Overview

Pathfinder International is working with its partners Camber Collective, Dharma Life, Gram Vaani, Lintas, and Dalberg as part the YUVAA Project to provide specialized technical assistance in behavior change to inform interventions that promote genuine choice and to support young people in the decisions they make. One of the main objectives of YUVAA is to understand the behaviors, gender and social norms that influence young married couples and first-time parents (ages 15-24) to use or not use contraception to delay their first birth and to space subsequent births. This report focuses on the quantitative analysis conducted by Camber to help investigate this question and to provide YUVAA partners with:

- A nuanced understanding of overall FP dynamics in the target population
- An identification of distinct subgroups of men and women who have different FP needs, attitudes, and behaviors and who, as a result, have varying relative propensities to change behavior
- Guidance on how YUVAA could design program content, program deployment, and technology interventions to serve men, women, and couples' needs as effectively as possible

Camber Collective worked with a local market research firm, Kantar Public, to develop and implement a survey of young men and women to test their key drivers of behavior change. The survey instrument, a 45-minutes co-designed questionnaire, was designed to capture general levels of knowledge, key attitudes, and norms around use of family planning. In addition, the survey asked specific questions regarding couple dynamics, agency, and key influencers in people's lives.

Major insights of the quantitative survey results highlight a wide array of factors that influence how men and women think about family planning and the degree to which they might be open to the range of technology and counseling-based interventions to be provided by YUVAA's implementing partners.

Thematic insights

Contraceptive Use and Intention

At a high level, we found that the majority of men and women (81%) had never used any form of contraception. While this number varied slighlty between p0 (91% never used) and p1 (73% never used), this indicates that there is considerable scope for increasing. In addition, we found that men and women generally seem to have strong intentions to use FP (87% of men and women stated that think they will use a method in the future) and generally want relatively small families (~2 children).

While, most people (87%) do intend to use contraceptives in the future at some point timing varies to some extent based on gender of children. There seems to be a higher likelihood to delay use (say you intend to use later) if your first child is a girl than if your first child is a boy. The percentage of people with sons who intend to use later (as opposed to sooner or unsure) is 11%, while the percentage of people with daughters who intend to use later (as opposed to sooner or unsure) is almost 50% greater at 18%.

In addition, even though intention to use is high, this intention is often grounded in future plans, with the majority of men and women stating that they are most likley to use FP after the birth of their second child. As such, limiting is a future concept that people are fairly open to while spacing (especially > 3 year spacing) is a concept that not everyone is open to. Even the people that are open to it and who cite an ideal spacing of > 3 years, generally seem adaptable and are not strongly tied to ensuring a > 3yr spacing period. In essence, results from research show that people are not fundamentally opposed to using FP (e.g. no serious religious objections), yet not everybody believes in the salience of using (i.e. the importance of using right now). Many of our recommendations for intervention design as such focus broadly; we do not solely promote knowledge and acceptance - of which there is a fair degree in some segments - but also emphasize the importance of promoting urgency of action. A sense of decisiveness for couples to commit to longer spacing periods between children, rather than being as adaptable as they currently are, is currently a key gap in the mindset of YMCs.

One of the main objectives of YUVAA is to understand the behaviors, gender and social norms that influence young married couples and firsttime parents (ages 15-24) to use or not use contraception to delay their first birth and to space subsequent births.

Literacy

Another significant finding in the data is that literacy, both regular and digitial are fairly high. In terms of education, 56% of women have completed up to SSC/HSC or above and very few are illiterate (11%). Men are also well-educated with the majority having completed SCC/HSC or above (68%) and very few being illiterate (6%). Digital literacy is high for both men and women. 90%+ know how to use basic phone functions, such as dialing numbers from saved or verbally provided contact lists. In addition, both men and women have a relatively high degree of access to and comfort with basic technology. 63% of women own their own phones and many are using a phone every day (79%) even if they don't own it. Unsurprisingly, almost all men own their own phone (94%) and are very actively using their phones (95% every day). In looking at more comlex technology, however, we found that less than half of men and women (40%) owned 'smart phones' (with GSM and feature phones being more common) and that only 20% of men and women used their phones for interacting with mobile apps.

Overall, when looking at phone access combined with generally higher than expected literacy, it seems there is a a solid foundation for the introduction of YUVAA interventions, but that the level of sophistication of mobile interventions may need to be restricted in order to allow more universal applicablity, and that specific, less technology driven (and more direct contact driven) strategies may be required for the small but still present sub-population with limited phone access.

Partner Dynamics and Gender Norms

At a high-level, the data shows that partners seem to have the foundations for strong relationships:

- Partners generally trust each other (94% of men and 93% of women say they 'trust their partner completely')
- Partners seem to rely on each other as important sources of influence (85% of men and 73% of women ranked their partner as their number one source of influence)
- Partners generally have confidence in joint problem solving (91% of men and 91% of women agree that 'I can solve big problems with my partner')

That said, even with these relatively strong foundations, there are significant variations in couples' communication dynamics as they play out on a day-to-day basis. The degree to which couples openly communicate about FP, take into account partner opinions, and are open to disagreements varies by segment but is much lower overall than what one might expect given the strong foundations of trust, influence and joint problem solving that seem to exist:

- 26% of men and 54% of women report never having discussed FP with their partners
- 48% of men and 46% of women say they don't always take into account what their partner thinks is important
- 32% of men and 67% of women are not open to disgareements between the couple (with the man stating that he doesn't believe it is okay for his wife to disagree with him or the woman stating that she fears disgareeing with her husband)

As such, while strong foundations of trust, influence and joint problem-solving do exist, the extent to which these strong foundations manifest themselves in couple communications varies. As we further examine the segments of men and women identified in this report, it will be important to understand where strong foundations lead to strong couple communications, and where strong foundations don't neccesssarily yield strong couple communications and where, as a result, interventions focused on activating healthy dialogue between partners will be most important.

In thinking about activating healthy dialogue, data shows that it will be important not only to ensure dialogue such that male partners are truly engaged in FP decisions and choices but to help couples become comfortable discussing a range of topics. Even the most commonly discussed topics are currently not discussed by a lot of couples. These topics include contraceptive goals (only 54% of women say they discussed this with their partners) and what methods are available/ can be used (only 32% of women say they discussed this with their partners). When it comes to more nuanced topics around choice (e.g. whether age/ parity should influence method choice and/ or how to find a method that works for you if you are not satisfied), less than 10% of women report actually discussing with their partner.

There are also indications in the data that women's interactions are constrained by others in their family and that there may be a need to focus on helping women feel more confident and empowered in holding and acting on their opinions.

- 75% of women (vs. only 39% of men) in our sample stated that the approval/ support of someone was important to them
- 59% of women agreed with the statement 'I get nervous or fear disagreeing with my MIL'
- 67% of women agreed with the statement 'I get nervous or fear disagreeing with my partner'

Segmentation Insights

Overall, our segmentation focused on gaining a better understanding of the different sub-groups of men and women that exist and the potential levers best suited to encourage positive behavior change in a particular sub-group. This approach looked beyond demographic factors and focused more on attitudinal and behavioral characteristics.The segmentation analysis identified five key co-ed segments:



SEGMENT 1 (23%; mostly female) Reserved

Happy with short spacing (< 3 years between children), has low use, knowledge and comfort with discussing FP and is generally reserved and reliant on others for approval



SEGMENT 2 (23%; mostly female) Isolated/ Good intentions

Healthy spacing intentions (> 3 years between children) but satisfied with short gaps, has lowest FP use, knowledge and, openness to discussion and lacks strong communication with partner In addition to identifying segments, we are also developing a classification tool that will allow anyone to identify which segment a person belongs to. The classification tool is in the form of a quick, accurate, and easy to facilitate survey that YUVAA Corps members (and other partners) will be able to use to classify people they talk to and tailor their engagements and interventions accordingly.



SEGMENT 3 (21%; mostly male) Social

Doesn't strongly believe in YUVAA spacing (> 3 years between children), but very open to discussing FP outside of family; only has limited experience using it or discussing with partner



SEGMENT 4 (17%; mostly male)

Theory minus practice Believes in spacing (> 3 years between children) and has strong partner communication but has never used FP before and doesn't have particularly strong intention to use

SEGMENT 5 (16%; mostly female) Knowledgeable

Believes in urgency of spacing children (> 3 years between children) and seems knowledgeable about FP, also has a strong relationship and healthy communications dynamic with partner



Background & Team

General background on the firm

Camber Collective is a strategy consulting firm that helps its clients achieve high performance against financial and missionrelated goals. Camber has extensive experience supporting foundations and nonprofits in customer insights, demand analysis, landscaping, strategy development, and behavior change innovation. Its clients include the world's leading philanthropies, multi- and bi-laterals, NGOs, and mission driven companies. Camber works in global health, financial inclusion, philanthropic effectiveness, and healthy communities, with experience in 50+ countries, primarily in Africa and Asia.

Experience in FP and segmentation

Camber's work in FP to-date has focused on understanding the demand for FP, using best-in-class customer insights methods from the private sector. Camber Collective has developed unique methodologies for researching and segmenting populations, and surfacing unique insights about attitudes, behaviors, decisionmaking styles, and social influencers. This approach provides a much deeper view of the drivers of FP decision making than traditional demographic segmentation approaches, which enables innovation and rapid and adaptive learning.

Camber has previously conducted National Demand Analyses (a strategic planning methodology that develops a robust understanding of a population's family planning behaviors and needs) in Niger, Côte d'Ivoire and Benin, in partnership with the Ministry of Health. In Niger, Camber engaged key FP stakeholders (MOH, Population Services International, Marie Stopes International, EngenderHealth, Pathfinder) to apply the results of demand analysis, reaching 1.5M women and girls and showing positive impact on FP outcomes where impact has been evaluated. In Côte d'Ivoire and Benin, Camber's NDA included analysis on how demand is driven by environmental factors, such as perceptions and needs around economic/ educational opportunities.

To-date, Camber has worked with partners to drive FP-related behavior change using smaller-scale qualitative and/or quantitative research in nine countries, including Bangladesh, Burkina Faso, DR-Congo, Côte d'Ivoire, Ethiopia, Niger, Pakistan, Tanzania, and Togo, and covering youth, men, and/or adolescent service providers.

Activities & Responsibilities

Camber's Role is, as it relates to YUVAA

As part of the YUVAA Project, Camber Collective conducted advanced and highly nuanced segmentation research. This research was conducted to lay a solid foundation for the project's work in IPC, SBC content development, dissemination platforms, and the design of interventions for YMCs, and FTPs. In addition, the results of this analysis are intended to inform efforts to scale and sustain programming, and to ensure that programming is grounded in a sophisticated picture of the attitudinal and behavioral characteristics of young people in Bihar and Maharashtra.

In order to bring about valuable insights, Camber first distilled available information from Bihar and Maharashtra about young people's contraceptive demand and use, and then conducted a population-based survey using sophisticated survey methods (refer to page 11 of this report for details on survey design, segmentation theory, and segmentation process). Analysis of survey results generated segmented behavioral and attitudinal profiles of young people in both states, including more refined information on contraceptive use and unmet need. In addition, the analysis helped to identify those population segments where there appears to be significant potential to increase contraceptive use for delay of first birth or spacing of subsequent births. Camber also developed a simple classification tool for the YUVAA Corps to use to guide their interactions with YMCs, FTPs, and gatekeepers.



Before beginning primary research, Camber typically develops a "fact base" to capture the key dynamics that we believe will help us understand our target population. Given the extensive work that has been done to-date in India, in lieu of an extensive literature review, Camber conducted a rapid literature review which had three key objectives:

- 1. Understand the key insights and gaps from previous models that YUVAA builds on, namely PRACHAR
- 2. Understand what baseline data exists in terms of FP demand, couples dynamics, and intervention guidance for YUVAA partners
- 3. Keep a lens towards insights that would impact intervention design

As a starting point for the literature review, Camber reviewed a decade of insights from the PRACHAR project. Key insights that were relevant to YUVAA included evidence suggesting that:¹

- Interventions are effective when they are "tailored to different life-stages" of social and behavior change (see image below).
 - Note: Camber helps to build on this approach by further segmenting and nuancing three of the six life-stages identified by PRACHAR to better understand the needs, attitudes, and behaviors of the people in these groups.
- 2. The use of home visits, group meetings, and referrals by "change agents" (female health workers), was found to increase the odds of contraceptive uptake; though "the shift to ASHAs resulted in reduced quality and reach of interpersonal communication during home visits."

LIFE STAGES/ AUDIENCE SEGMENTS CONSIDERED FOR PRACHAR²

		Adolescent Boys and Girls	 Young adolescent girls (age 12-14), and older adolescent girls and boys (age 15-19) receive separate age-appropriate and life-stage specific AYSRH training
		Newlywed Couples with No Children	 Newlywed couples targeted together through "welcome ceremonies" combining education and entertainment Married women reached via home visits by female change agents Married men reached via group meetings by male change agents
FOCUS OF CAMBER'S RESEARCH	11	Pregnant or Postpartum Women (1st or 2nd Child)	 Women pregnant with their first or second child reached via home visits and group meetings by female change agents Postpartum women reached via home visits by female change agents only
	Ħ	Couples with One Child	 Women with one child reached via home visits and group meetings by female change agents Men with one child reached via group meetings by male change agents
	熱檢	Parents and Mothers- in-Law	 Community meetings Mother-in-law participate in home visits for daughters-in-law performed by female change agents
		Community at Large	 Street theater Wall paintings Puppet shows IEC materials

¹ Subramanian, et al. Global Health Science and Practice. "Increasing Contraceptive Use Among Young Married

Couples in Bihar, India: Evidence from a Decade of Implementation of the PRACHAR Project." 2018.

² PRACHAR: Advancing Young People's Sexual and Reproductive Health and Rights in India

 Note: Camber's research has a strong focus on creating tools and communications for YUVAA's "change agents," or YUVAA Corps Members, so that they can best counsel and support YMCs.

Overall, while the PRACHAR research focused on norms related to marriage, contraception, and fertility, Camber's research works towards these objectives and also towards more robustly addressing the gender inequitable attitudes, behaviors, and norms that underly contraceptive behavior and intersectional vulnerabilities. In short, Camber's approach to consumer insights is highly focused on needs, attitudes, behaviors, and social norms – for both men and women – to capture the full gender dynamic.

The most salient key themes from primary research conducted include:

ICRW

COUPLE POWER PROJECT

FINDINGS¹

- "The knowledge and attitudes towards family planning are key parameters to be addressed"
- "Issues around sexuality must be discussed upfront with young married couples as they entail control and negotiation"
- "Family planning must be situated in a broader context of both men and women rather than focusing only on women"

In response to these recommendations, Camber put an emphasis on: assessing spontaneous and prompted awareness of both traditional and modern methods of family planning; exploring the role of pleasure and sexuality in couples' decisionmaking; and pulling an equal perspective from men on FP attitudes and needs, as we did for women, to better understand the missing focus on males.

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INCREASING CONTRACEPTION USE AMONG MARRIED ADOLESCENTS AND YOUTH AND FTPS FINDINGS²

- For zero parity couples, "contraceptive use increases initially and then stabilizes" over a comprehensive
 5-year approach; for parity 1 couples, "contraceptive use continues to increase"
- Home visits to train young couples increases contraceptive use for zero parity, but was not significant for parity one



- When using ASHAs as change agents, "FP uptake did improve, but with limited reach and impact among zero parity married youth and concerns about quality" due to "many competing demands" and " highly incentivized for institutional deliveries (no incentive to visit zero parity non-pregnant women"
- "Male migration relates to discontinuation of FP use," as seen in an ethnographic study in Niger

In response to these insights, Camber put an emphasis on: understanding intention of and openness to uptake of family planning methods; providing implications for training and counseling at a segment-specific level, to increase the likelihood of behavior change; understanding men and women's familiarity and trust in ASHA and other health workers, as a context for positioning and framing the role of YUVAA Corps counselors; and including a sample of women who have migrant husbands, as well as capturing the number of months each male respondent is migrating in a given year, to analyze the challenges of migration as it relates to family planning.

BMGF

MWRA BIHAR STUDY

Before beginning survey design, Camber explored an earlier Bihar-focused study funded by BMGF that explored FP and health behaviors. This large study influenced what Camber prioritized and deprioritized for research, so that this new research would bring more nuanced insights. The table on the following page describes what information was covered by the existing study and what information was not covered that we wanted to ensure our research could uncover.

¹ ICRW. "Couples Power Project: Preliminary Findings from Formative Research Jharkhand." April 2017.

² Pathfinder. "Increasing Contraception Use Among Married Adolescents and Youth and FTPs." November 2017.

Review of Literature

	COVERED IN MWRA STUDY	NOT COVERED IN MWRA STUDY	FEMALE INSIGHT	MALE INSIGHT	COUPLES INSIGHT
FP Demand	 Awareness and use of FP Reasons for non-use and discontinuation Preferred method Past spacing of children Desire to be pregnant in next 6 mo. Past unintended pregnancy Ideal age at first birth and first sex HIV knowledge, risk and behaviors Age at first sex, and why that age Attitudes around spacing 	 Intention to use methods Immediate demand for FP Pregnancy ambivalence Personal attitude and opinions towards FP Salient personality traits/drivers of behavior (e.g. proactivity, ambition, resourcefulness) Ideal # of children/strength of son preference Husband's actual (or wife's perspective on his) needs, attitudes, and behaviors towards FP 			
Couple Dynamics	 Husband demographics Additional wives/husbands Age at marriage, and why that age Decision-making dynamics for: Having children (how many, when) Using contraception When to have sex When to get married Medical/health decisions Spending money Partner abuse If she can speak out on what's important to her at home 	 Frequency of SRH conversations Comfort in SRH conversations Perceived sense of security in marriage Attitudes of self-efficacy/ self-worth Confidence in managing social pressure Husband's actual (or wife's perspective on his) alignment with family vision 			
Intervention Guidance	 Degree of approval/disapproval of religious leaders, husbands, parents and female peers with respect to: Using health facilities Waiting to have sex until 18 Getting HIV tested Using a condom Using medical methods How much people take direction from religious and community leaders Engagement with radio, cellphone, internet, and other media channels Engagement with peer educator, HIV talks, FP dramas, condom demos Literacy Access to cookers/safe drinking water 	 Strength of FP influence (absolute and relative) of religious leaders, husbands, parents, and female peers Desired qualities in a health worker Supportive sources of FP/SRH info How FP/SRH ranks in her priorities Who she talks to about FP/SRH Comfort with innovation Male engagement and perspective 			

Few gaps Several key gaps Many gaps

Selection of Market Research Firms

In order to field the male and female surveys in each of the two target states, Camber vetted and ultimately selected a local, Indian data collection firm, Kantar Public. Selection criteria mainly focused on prior experience conducting quantitative surveys in-country, familiarity with the field, and the feasibility of implementing a given sampling frame. In addition to field experience, the selected partner had to demonstrate a history of strong analytical rigor, data quality, and the ability to deliver results on schedule.

Kantar met (and in some cases, exceeded) these criteria.

As work progressed, Kantar Public was instrumental in reviewing and qualitatively testing the instrument in-country and in suggesting revisions to the proposed questionnaire, survey design, and sampling plan. Kantar Public also submitted recommendations, along with a plan for training survey enumerators, data collection methodology, and a data quality assurance plan.

Surveys were field tested in each state before being finalized and field tests were used to identify questions that required modification to best suit the local cultures and languages. In advance of field-testing survey enumerators underwent rigorous training on the overall project goals, interpersonal skills, and methods of contraception. After field testing, Camber reviewed and approved all materials prior to launch of the final survey in each state. The survey was made as consistent as possible across study sites, with minor adjustments made for local language and cultural sensitivities.

Sampling Methodology, Ethics, and Data Collection

Prior to data collection, individual men and women consented to participate in the study. Every effort was made to respect the privacy and confidentiality of the study participants. The study team received training in ethics, and standardized procedures were used for data collection. The following measures were in place to uphold high ethical standards and ensure confidentiality:

STAFF

• All staff participating in data collection received training in study ethics and signed an agreement to comply with them throughout the duration of the study and afterwards.

PARTICIPANTS

• Participants were informed that their participation was confidential, and that there would be no consequences if they chose to not participate.

PARTICIPANT INFORMATION

 All participant information was only connected to an identification number and not to personal, identifiable information. All data collected was de-identified, and each respondent entry was coded with a unique and anonymous survey participant number



Market Research

CRITERIA	INDICATOR	RATIONALE	WEIGHTS	SOURCE
Market Size	Primary TG: Parity 0 and 1 married couples between 15-24 years	 In line with program mission Implies a larger market for YCs Achieve a greater program impact 		Census 2011
Ability to Pay	Category B, C, and D under Socio Economic Caste Census classification	 Higher disposable income for contraceptive purchase Higher probability for the YC to sell high margin/ticket items 		Socio economic caste census 2011
Ability to Reinforce Messaging	Mobile penetration	 Higher probability for program effectiveness through GV layering 		NFHS 4
Ease of Operation	Geographic contiguity	 Facilitates ease of monitoring and managing program logistics Helps aggregate and better leverage YC and GV influence 	Districts within the same division/ region as partner presence were preferred	District and division maps of each state
Safety and security	Left Wing Extremism affected districts	 LWE label signals broader security risks in the district For YUVAA corps to be able to travel without safety concerns 	De-prioritized LWE districts after validating with district-level experts	Ministry of Home Affairs
Ease of Entry	Partner presence	 Ability to leverage existing partnerships, infrastructure, brand value and local knowledge to drive program effectiveness 	Preference towards districts with Dharmalife and/or Gram Vaani presence	Partner discussions
Ease of Access	Target Group Density (SEC cut of TG/Land area)	 Ability to reach out to more number of target beneficiaries with lower cost of travel and effort 	Preference towards high density districts	Census 2011

District selection was a 3-step process for each state (Bihar and Maharashtra):

- 1. Ten districts were shortlisted based on the market size, ability to pay, and ability to reinforce messaging.
- 2. Five of those ten districts were selected based on their enabling environment and ease of program roll out.
- 3. These five districts were confirmed based on feasibility and qualitative expert opinions.

Once district selection was complete, 10 PSUs were randomly selected from each district. A housheold listing exercise was conducted in each PSU in order to identfiy those households in which there were couples that met the survey eligiblity criteria. 10 households were then randomly selected from each PSU's list of households with eligible couples. The couples in those households were then approached for the survey. In total, there were 1,851 respondents made up 848 women and their husbands, and 155 migrant wives (husbands not interviewed).

The sample overall was designed to have significant engagement across a variety of demographic factors and the final set of 1,851 survey respondents was:

- Evenly split between Bihar (50%) and Mahrashtra (50%) (5 districts/ state, 10 PSUs/district, and 10 couples/ PSU)
- Almost evenly spilt between men (46%) and women (54%)
- Almost evenly split between p0 (44%) and p1 (56%)

At a high-level, our sample was 75% rural and 25% urban, and the respondents ended up having the following characteristics:

- Men: Avg. age: 26; Avg. literacy: 94%; Avg. Employment 66%
- Women: Avg. age: 21; Avg. literacy: 89%; Avg. Employment 3%
- 96% arranged marriages with avg. age at marriage being 23 for males and 18 for females

Survey Design

Camber's general approach is to identify key behavioral dynamics that are preventing the target population – or segments of the target population – from changing their behavior. To do this, we generally try to define: 1) key dynamics that influence behavior, and 2) willingness to change behavior.

These include:

- General factors (i.e., social, cultural, political, or macroeconomic factors);
- Individual-specific factors, building on the integrated behavioral model (i.e., degree to which an individual is influenced by norms; life aspirations; past experiences; self-efficacy – see next section for additional detail on the integrated behavior model);
- Tactical issues that may serve as barriers to care; and
- Influential family members or people in the community that may shape a man's or woman's willingness to change behavior, which may be partially captured by some of the above dynamics, but may also have other components.

Once we have an understanding of the key dynamics that we believe will be important in understanding our target population, we progressively develop, typically with partner input at each stage, our survey objectives, the key (meta) questions to test in the survey, and a mapping that defines what dynamic each question is testing for, and finally the complete survey instrument.

In the case of YUVAA, survey questions were designed to also take into account knowledge gaps in existing research, programmatic questions that partners wanted answered, and other questions that coule be used to inform future project M&E efforts. The survey tool was designed in coordination with all partners, and with guidance from our market research firm, Kantar Public. Kantar Public also field-tested survey questions through a series of pilot tests in Bihar and Maharashtra.

In addition to the content-specific factors mentioned above, our survey instruments also have built in behavioral economics principles which are based on feedback from a behavioral economist who contributed to the creation or our original segmentation survey in Niger, and reproductive health knowledge, based on feedback from a reproductive health specialist with quantitative research experience in West Africa. Our questions are also carefully crafted and reflect best practice in marketing science given that they are written to reduce pro-social response, specifically test for stated vs. revealed preferences, and improve response quality (through optimizing survey length, question timeframe, question order/ flow, and question specificity).



Segmentation Theory

Overview of Integrated Behavior Model / behavior change theory

Somebody's likelihood to change their behavior can be difficult to measure, and exceedingly difficult to address. There are a wide range of barriers that young men and women face in using contraceptives and is therefore important to understand the different sub-groups of men and women that exist and the potential levers best suited to encourage positive behavior change in a particular sub-group.

A more basic segmentation analysis looks solely at demographic traits and, while straightforward, typically lacks power in identifying levers for influencing respondent behaviors. The segmentation conducted as part of this project looks beyond demographic factors, focusing more on attitudinal and behavioral characteristics, which can be a powerful tool for understanding intent to change behaviors.

Camber's focus on attitudinal and behavioral characteristics as drivers on intention and ultimate drivers of behavior change is based on the Integrated Behavior Model.

Per this model, there are five components that directly affect behavior.

- 1. An individual needs the **knowledge and skills** to carry out the behavior.
- 2. The behavior should be **important/**salient to the person.
- 3. There should be few or **no environmental constraints** that make behavioral performance difficult.
- 4. With experience performing the behavior, the **behavior** will become habitual for the individual.
- However, the most important determinant is <u>intention</u>. Without intention to do so, an individual is unlikely to carry out a behavior.

Behavioral intention, according to the model, is determined by attitudes, perceived norms, and personal agency. Each of which are described below.

ATTITUDE

Experiential attitude (or affect) is the individual's emotional response to the idea of performing the behavior

Instrumental attitude (or cognitive) is determined by beliefs about outcomes of behavior

PERCEIVED NORMS

Injunctive norms (similar to subjective norm) refers to normative beliefs about what others think one should do and motivation to comply **Descriptive norm** refers to perceptions about what others in one's social or personal networks are doing. Meant to capture situations where there is strong social identity

PERSONAL AGENCY

Self-efficacy is an individual's belief in his/her effectiveness in performing specific tasks as well as by their actual skill

Perceived control is an individual's perceived amount of control over behavioral performance. It is determined by control beliefs (an individual's perception of the degree to which various environmental factors make it easy or difficult to perform a behavior)

Segmentation Process

Developing a segmentation is a multi-step process and incorporates both quantitative analysis and qualitative assessments. The first step is to discern which variables truly matter in producing meaningful and distinct outcomes. Amongst the total set of variables from the survey, Camber analyzed the results in SPSS to find where multiple variables could be combined, to filter out variables with high levels of missing data or refused responses, and to identify variables with variability amongst response options.

From the total set of all available variables, an initial selection of active segmentation variables was chosen based on findings from the literature reviews, the cleaning process, and guidance from stakeholder consultations. From that initial selection, several iterations of the segmentation model were completed, adding and removing active variables to assure that:

- A cluster analysis could be chosen where each individual segment was sizable (~>10%) though segments were not so large that findings were too generalizable
- The model had optimal statistical significance based on a series of statistical tests (BIC, Npar, L², p-value, and class error)

We ran segmentation models iteratively to determine the best model, and within that model, the best number of clusters. This process is iterative, and both an 'art' and a 'science':

 The best model is determined by the level of differentiation across segments and a qualitative judgment of the consistency of the segment's narrative and relevance of the differentiating factors for our project context

The best number of clusters within the chosen model is determined by the bayesian information criterion (BIC) statistics and level of classification error, the practicality of size of the segments, and the migration patterns across cluster solutions.

Segmentation Development

Finding an optimal segmentation solution is an iterative process. We ran seven separate models and evaluated each with 3-cluster, 4-cluster, 5-cluster, and 6-cluster solutions. For each model, we also ran known-class 5-cluster and 6-cluster solutions that created one male-only and one female-only segment to understand if gender-specific segments would be meaningful, though we found these to be far less significant than the gender neutral segmentations that we ended up creating. Each model used a unique combination of active (or "driving") variables to create segments amongst the overall sample of men and women. After analyzing the statistical differences (AIC, BIC, p-values, and L2) and the storylines for over 40 different solutions, we ultimately chose a 5-cluster solution from one of the models.

Our segmentation solution includes five co-ed segments based on a sample of 848 men and 1,003 women. These 1,851 people were driven into their unique segment based on a list of 19 optimal active variables. As determined by an extensive chi-squared analysis, these variables all had strong correlations to key proxies of YUVAA success (FP awareness, FP ever use, unmet demand, and satisfaction with 3-year spacing periods) for both men and women. These statistically significant 19 variables can be categorized into six key areas that influence behavior change: attitudes, agency, norms, salience, FP knowledge and skills, and key influencers. Active variables related to YUVAA attitudes include the degree to which respondents were satisfied with short (< 3 years) spacing periods and the degree to which their stated ideal gap between children was aligned with YUVAA's objectives. Variables related to agency in couple-decision-making include the man or woman's comfort in disagreeing with their partner, and the degree to which they considered their partner's opinions in their own decision-making. Variables related to norms include openness to discussing FP both inside and outside one's family. Variables related to salience include the urgency of one's intention to use FP and the stated ideal timing of a next pregnancy. And finally, active variables related to key influencers include whose approval and support is the most important and in what priority.

FP KNOWLEDGE AND SKILLS Aware of method options and experience using methods	 Spontaneous awareness of modern methods Ever use of traditional methods Ever use of modern methods Current use of modern methods
ATTITUDES Belives in healthy spacing between children	 Satisfaction with <3 year spacing period Stated ideal gap in age between children
SALIENCE (OF FP GOALS) Has goals and motivation to plan family	 If pregnancy now would pregnancy be a problem Existence of unmet demand Intention urgency Stated ideal timing for next pregnancy
NORMS Is comfortable discussing FP	 If he/she has discussed FP before If he/she has discussed FP outside of family (with provider/friends) If he/she has fatalistic views of FP
AGENCY Partnership in decision-making and communication	 Agreement with the statement 'I don't always take into consideration what my partner thinks is important' Agreement with the statement 'My partner often dismisses my ideas and wishes' Openness to disagreement
KEY INFLUENCERS	• Who is his/ her key source of approval and support (ranked)

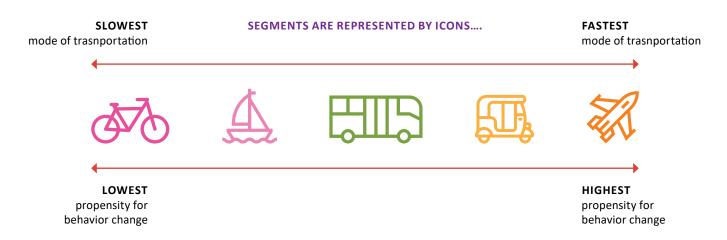
LIST OF FINAL ACTIVE VARIABLES



Segment Profiles: Overview & deep-dive

Once the statistical analysis identified the five clusters, we examined survey responses for each group to get a better understanding of their respective attitudes, agency, norms, salience, FP knowledge and skills, and key influencers. After examination, we developed profiles for each of the five segments and identified opportunities for behavior change. Note, in conducting the segmentation, we were keenly aware of the need to ensure that segments could be easily used to actively interact with the population. We customized our approach to ensure that we would end up with a finite number of segments that would not be overwhelming for YUVAA Corps members to understand and internalize. This is also one of the key reasons why we chose to create five co-ed ed segments instead of, for example, ten segments (five of men and five of women). In our experience, five segments has proven to be a manageable number while still allowing unique differences across sub-populations to manifest themselves.

Overall, the five identified segments varied both in their propensity for behavior change, as well as in their demographics. In order to make it easier to internalize segments, each segment was assigned an icon representing a mode of transportation. The average speed of the mode of transportation was intended to help signify the likely speed/ propensity of positive behaviour change of that segment. The infographaics on the following pages show differences across segments, in order to give a snapshot of how segments vary across a number of important dimensions (e.g. propensity for behaviour change, FP knowledge and skills, demographics, technology usage, and demand for different goods) basket of goods):



Segment Distribution

HOW TO INTERPRET VISUALS? FOR EACH SEGMENT....

Step 1: Each row adds up to 100%. Refer to the data points listed in the column associated with the segment for information for that particular segment (e.g 31% of women are in segment 1).

By Gender and State

	SEGMENT 1	SEGMENT 2	SEGMENT 3	SEGMENT 4	SEGMENT 5
	Reserved	Isolated/ Good intentions	Social	Theory minus practice	Knowledgeable
All Women (N=1,003)	31%	31%	7%	10%	21%
All Men (N=848)	14%	13%	39%	26%	7%

→ Both women and men can be found in all segments. Women are least likley, however, to be found in segment 3 and men are least likley to be found in segment 5.

Bihar (N=922)	36%	25%	26%	4%	9%
Maharashtra (N=929)		20%	17%	30%	21%

→ All segments can be found in each state. Maharshtra is likely to have large population of segments 4 and 5, and Bihar is more likley to have large populations of segment 1.

A co-ed segmentation was a better fit for YUVAA than gender exclusive segments because:

1. Men and women demonstrate2. Simplicity is critical forsimilar clusters of attitudespromoting use by YUVAA Corps

Segment Overview

HOW TO INTERPRET VISUALS? FOR EACH SEGMENT....

Step 1: Refer to data points listed in the column associated with the segment for information for that particular segment (e.g segment 1 represents 23% of the total population)

Step 2: Refer to colored rectangles for relative comparison of the strength of each segments' characteristics (e.g. Segment 1 has low knowledge (light shading) compared to segment 5's knowledge (dark shading)

	SEGMENT 1	SEGMENT 2	SEGMENT 3	SEGMENT 4	SEGMENT S
	Reserved	Isolated/ Good intentions	Social	Theory minus practice	Knowledgeable
% of total population	23%	23%	21%	17%	16%



Segment 1 is least open to behaviour change; segment 5 is most open.



Endoning / tereduco					
Salience	Medium	Medium	Medium	Low	High
Enabling Norms	Low	Low	High	Medium	Medium
Agency	Low	Medium	Low	High	High

\rightarrow KEY TAKEAWAY Segments vary in their levels of FP use and awareness; segment 5 is comparatlively high on both.

KNOWLEDGE AND SKILLS

Current Use (modern)	1%	1%	5%	2%	22%
Ever Use (modern)	5%	3%	19%	9%	53%
Spontaneous Awareness	36%	45%	56%	38%	88%
*Unmet Demand	38%	14%	37%	16%	44%

TOP INFLUENCERS (THOSE WHO WERE APPROCHED FOR DICUSSION AND GUIDANCE IN THE LAST 12 MONTHS)

#1	Partner	Partner	Partner	Partner	Partner
#2	Man's mother	Health workers	Health workers	Man's mother	Man's mother
#3	Man's father	Man's mother	Friends	Man's father	Woman's mother

Demographics

HOW TO INTERPRET VISUALS? FOR EACH SEGMENT....

Step 1: Refer to colored numbers for specific data point for a particular segment (e.g. Under "Female Age" category, dark pink "20.3" corresponds to dark pink "segment 1")

Step 2: Refer to colored rectangles on line for relative spread and comparison across all segments (e.g. Under "Female Age" category, age spread is narrow with orange "segment 5" being oldest)



Technology

HOW TO INTERPRET VISUALS? FOR EACH SEGMENT....

Step 1: Refer to the data points listed in the column associated with the segment for information for that particular segment (e.g 69% of people in segment 1 have "access to phone").

	SEGMENT 1	SEGMENT 2		SEGMENT 4	ZK.
	Reserved	Isolated/ Good intentions	Social	Theory minus practice	_ <u>SEGMENT 5</u> Knowledgeable
*ACCESS TO PHONE	69%	74%	87%	86%	72%
→ KEY TAKEAWAY	All segments make phone calls; segments 4 and 5 are more likely to be texting and using mobile apps.				
**TIME ON PHONE SPENT					
Making Phone Calls	98%	98%	92%	99%	100%
Sending Text	21%	24%	22%	63%	41%
Listening to Music	44%	42%	55%	64%	45%
Using Mobile Applications		21%	18%	27%	26%
→ KEY TAKEAWAY	Tech literacy is high				

segment 4 is particularly adept with smartphone apps.

**ABILITY TO...

Dial a Number if Given Verbally	94%	94%	98%	99%	97%
Dial a Number if Written Somewhere	96%	95%	97%	98%	98%
Access a Saved Number from Phone's Contact List	89%	91%	90%	94%	95%
Use an App on the Smartphone	36%	42%	46%	60%	47%

 \rightarrow KEY TAKEAWAY Segments 1 and 4 have least 'freedom' to use phone; segments 3 and 5 have most.

**ABILITY TO...

***Make a Call Without Permission	44%	28%	18%	35%	20%
--------------------------------------	-----	-----	-----	-----	-----

*Access to phone question did not specify confidential access

**N=1,812, Asked to all those who own a phone, share a phone, or have someone in the household who owns a phone; only not asked to those who have nobody in the household who owns a phone

Basket of Goods

*Top 5 items and Contraceptives

HOW TO INTERPRET VISUALS? FOR EACH SEGMENT....

Step 1: Refer to the data points listed in the column associated with the segment for information for that particular segment (e.g 25% of people in segment 1 are interested in "sanitary napkins")

		SEGMENT 1	SEGMENT 2	SEGMENT 3	SEGMENT 4	SEGMENT 5
TOP 5 ITEMS	AVERAGE	Reserved	Isolated/ Good intentions	Social	Theory minus practice	Knowledgeable
Sanitary Napkins	42%	25%	43%	38%	59%	60%
Mobile Phones	35%	22%	21%	43%	65%	35%
Small Appliances	32%	29%	21%	33%	53%	30%
Diapers	20%	14%	10%	22%	28%	32%
Nutritional Additives	17%	22%	13%	26%	11%	11%
CONTRACEPTIVES						
Condoms (N=42)	4%	2%	1%	8%	6%	11%
Oral Pills (N=15)	1%	1%	0%	8%	4%	0%
→ KEY TAKEAWAYS			P,			R
		Seg. 1 expressed most interest in SMALL APPLIANCES	Seg. 2 expressed most interest in SANITARY NAPKINS	Seg. 3 expressed most interest in CELL PHONES	Seg. 4 expressed most interest in CELL PHONES	Seg. 5 expressed most interest in SANITARY NAPKINS

*Above data captures spontaneous responses to the question 'want to quickly understand some of your general needs and priorities. Which goods will you need over the next six months?' Note: Enumerators did not read options to respondents.

In addition, each of the five segments that emerged had different key influencers and varying levels of enabling attitudes, agency, norms, salience, and FP knowledge and skills. These differences make the segments unique and imply that they may have different levels of openness to, and ability to comply with YUVAA objectives. These differences also imply potential for customized approaches for the different partners as they design interventions that are compatible with the needs of each segment.

Ideal Delay (Parity 0)

For first pregnancy: stated ideal timeline ("when would you ideally likey to have a child?"), how long after marriage (difference between ideal timeline and age at marriage), and what age is preferred (current age plus ideal timeline)

Parity 0 Women

22.9

22.4

22.3

23.0

23.5

24.2

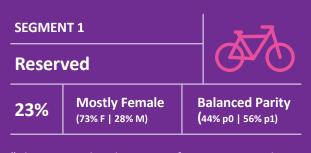
HOW TO INTERPRET VISUALS? FOR EACH SEGMENT....

Step 1: Read the label at the top left corner of each table to understand the metric being captured.

Step 2: Refer to the data points listed in the column associated with the segment for information for that particular segment (e.g segment 4 women ideally want to have a child 3.3 years after they got married, typically around age 23.5).

le

ference between ideal timeline and age at marriage), and what age is preferred (current age plus ideal timeline)		SEGMENT 1	SEGMENT 2		SEGMENT 4	SEGMENT 5	
%	UNSURE OF IDEAL PREGNANCY TIMELINE	AVERAGE	Reserved	Isolated/ Good intentions	Social	Theory minus practice	Knowledgeable
	→ KEY TAKEAWAYS				to have their first ch nen) express high un		partner.
	All Parity 0	31%	7%	23%	47%	61%	19%
	Parity 0 Men	42%	10%	34%	46%	61%	21%
	Parity 0 Women	23%	6%	19%	56%	61%	19%
	IEAN # OF YEARS						
	→ KEY TAKEAWAYS	delay periods (+3		iage), indicating	eir first child, both r they don't desire pro ay periods.		
	All Parity 0	3.6	3.5	2.9	4.9	4.2	3.5
	Parity 0 Men	4.6	4.2	4.0	5.1	4.7	4.8
	Parity 0 Women	3.0	3.2	2.6	3.9	3.3	3.1
M	IEAN AGE AT IDEAL PREGNANCY						
	→ KEY TAKEAWAYS		lar for all segmen		their first child, won ıe for men. Very few		
	All Parity 0	25.0	23.9	23.4	26.8	28.2	25.6
	Parity 0 Men	28.2	27.8	26.6	27.6	30.0	30.5
		22.0		22.2	22.0		24.2



"The approval and support of my partner and [husband's] family is so important to me that I'm nervous or fear giving opposing opinions. Communicating my opinions and feeling heard is a big challenge for me. FP seems like something I want to use soon, but I just haven't talked about it or learned about my options enough to have a strong opinion on it."

ENABLING ATTITUDES

EXISTING FOUNDATIONS

GAPS

- Parity 0 want to wait 3+ years after marriage before having their first child (mean: 3.5)
- Satisfied with 'unhealthy' timing of births (78%)
- Parity 0 women don't desire teenage births (mean ideal age: 23.9)
- For many, ideal gap in age between children is fewer than 3 years, or are unsure (47%)
- Timimg attitudes are generally unhealthy and anchored
- to shorter periods:
 - Provide content outlining the benefits of healthy timing of births

ENABLING NORMS

EXISTING FOUNDATIONS GAPS • Many haven't ever discussed FP with others (50%) • Never discussed FP with ASHA or other health worker (100%) • Never discussed FP with friends (99%)

Not a norm to discuss FP openly, especially outside of the family:

5 Provide a channel for couples to listen to how other couples are using methods for spacing or delaying

KNOWLEDGE AND SKILL

EXISTING FOUNDATIONS

Lowest awareness of modern methods – the majority can't list any modern methods (64%)

GAPS

 Very few have ever used a modern method (5%) or traditional method (2%)

GAPS

Pregnancy is not a

problem for most (61%)

Needs basic education of FP methods:

 Create beginner level content outlining the basics of different FP methods

SALIENCE

EXISTING FOUNDATIONS

- High unmet demand (38%)
- Has a goal for when they ideally want their first/next pregnancy (92%)
- Intends to use FP (77%)
- Many intend to use FP after birth of next child or in the next year (41%)

Relatively strong demand for and intention to use FP, though lack urgency to use a method right now:

6 Encourage couples to build a fertility plan and to set goals, focused around planning for next pregnancy

AGENCY

EXISTING FOUNDATIONS GAPS

- Doesn't always take into consideration what partner thinks is important (67%)
- Many men think disagreement from partner is inappropriate and women fear disagreeing with partner (58%)
- Feels that their partner often dismisses their wishes (62%)

Poor communication dynamic with partner; need for developing listening and negotiation skills:

- Encourage couple communication and joint-decision making
- 3 Focus on improving negotiation skills and comfort with conflict
 -) Create content about communication styles and listening

SEGMENT 2

Isolated/Good Intentions

23%

Mostly Female (73% F | 27% M)

Balanced Parity (55% p0 | 45% p1)

"Disagreements, especially with my partner and [husband's] mother, are something I avoid, so I tend to rely on myself for important health decisions. FP isn't something I've talked about or understand, but I do see myself using it. Right now, I'm pretty flexible to whatever comes my way."

KNOWLEDGE AND SKILL

EXISTING FOUNDATIONS

GAPS

- Average awareness of modern methods - the majority can't list any modern methods (55%)
- Very few have ever used a modern method (3%) or traditional method (2%)

Needs basic education of FP methods:

Create beginner level content outlining the basics of 7 different FP methods

EXISTING FOUNDATIONS

GAPS

- Ideal gap in age between children is 3 or more years (64%)
- Satisfied with 'unhealthy' timing of births (65%)
- Parity 0 want to wait ~3 years after marriage before having their first child (mean: 2.9)
- Parity 0 women don't desire teenage births (mean ideal age: 22.3)

Timing attitudes are generally healthy, but are also adaptable to shorter (unhealthy) periods:

Encourage couples to build a fertility plan and to set goals, focused around healthy timing for next pregnancy

ENABLING NORMS

6

EXISTING FOUNDATIONS GAPS • Most haven't ever discussed FP with others (62%) • Never discussed FP with ASHA or other health worker (100%) • Never discussed FP with friends (100%)

Not a norm to discuss FP openly, especially outside of the family:

5 Provide a channel for couples to listen to how other couples are using methods for spacing or delaying

SALIENCE

EXISTING FOUNDATIONS

• Intends to use FP (66%)

• Has a goal for when they ideally want their next pregnancy (74%)

GAPS

- Pregnancy is not a problem (86%)
- Lower unmet demand (14%)
- Few intend to use FP after the birth of next child or in the next year (31%)

Intends to use FP someday, but it's not a priority in the near future; doesn't have an immediate plan or idea about when to start using:

Introduce content to persuade on urgency of using FP now 8 (as opposed to later)

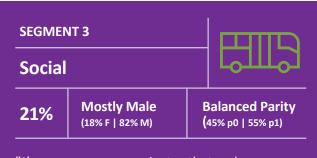
AGENCY

EXISTING FOUNDATIONS GAPS

- Most always take into consideration what partner thinks is important (64%)
- Many men think disagreement from partner is inappropriate and women fear disagreeing with partner (65%)
- Few feel that their partner often dismisses their wishes (25%)

Feel that their voices are heard by their partners, but don't feel comfortable with expressing disagreement:

3 Focus on improving negotiation skills and comfort with conflict



"I'm an open communicator that welcomes differing opinions from my partner and likes to hear the perspectives of people outside of my own family. I talk about FP with many people, but I'm undecided on my family planning goals and timing."

KNOWLEDGE AND SKILL

EXISTING FOUNDATIONS

- Many are aware of modern methods - the majority can list modern methods (56%)
- Some have experience using a modern method (19%) or traditional method (8%)

• Not many can list more than two modern methods (29%)

GAPS

- Needs to deepen education of FP methods, but has a stronger base than the vast majority of YMCs:
- Create intermediate level content on the basics of FP q methods

EXISTING FOUNDATIONS

GAPS

- Parity 0 want to wait +3 years after marriage before having their first child (mean: 4.9)
- · Satisfied with 'unhealthy' timing of births (62%)
- Parity 0 women don't desire teenage births (mean ideal age: 23.0)
- Many want ideal gap in age between children is 3 or fewer years, or are unsure (49%)

GAPS

Timimg attitudes are generally unhealthy and anchored to shorter periods:

Provide content outlining the benefits of healthy timing 1 between births

ENABLING NORMS

EXISTING FOUNDATIONS

- All have discussed FP (100%)
- Have discussed FP with 3 or more people (83%)
- · Have discussed FP with ASHA or health providers (87%)
- Most likely to discuss FP with friends (53%)

Very social and open about discussing FP with their community and health professional; likely are engaging in and spreading FP info the most:

- (10) Create FP learning materials that can be discussed with friends
- Create FP learning materials or pamphlets that can be 11 discussed with health professionals

SALIENCE

EXISTING FOUNDATIONS

- High unmet demand (38%)
- Intends to use FP (61%)
- · Many intend to use in the next year or after the birth of next child (44%)

GAPS

- Pregnancy is not a problem (60%)
- Many unsure about ideal timing of having a/next child (44%, p0 and p1)

Relatively strong demand for and intention to use FP, though lack urgency to use a method right now:

Encourage couples to build a fertility plan and to set goals, 6 focused around planning for next pregnancy

AGENCY

EXISTING FOUNDATIONS GAPS

- Many men think disagreement from partner is appropriate and women don't fear disagreeing with partner (67%)
- Most don't always take into consideration what partner thinks is important (55%)
- Many feel that their partner often dismisses their wishes (44%)

Feel comfortable expressing disagreement, but don't feel that their voices are heard by their partners:



Encourage couple communication and joint-decision making

SEGMENT 4

Theory minus practice

17%

Mostly Male (30% F | 70% M)

Balanced Parity (47% p0 | 53% p1)

GAPS

"I think my partner and I have healthy, open conversations about our wishes and our goals for our family. I like to include our family's opinion for guidance as well. Still, I have a lot of uncertainty when it comes to planning my family and am unsure how FP methods fit into my life."

KNOWLEDGE AND SKILL

EXISTING FOUNDATIONS

GAPS

- Low awareness of modern methods - the majority can't list any modern methods (62%)
- Few have experience using a modern method (9%) or traditional method (2%)

Needs basic education of FP methods:

7

Create beginner level content outlining the basics of different FP methods

GAPS

ENABLING ATTITUDES

EXISTING FOUNDATIONS

- Few are satisfied with 'unhealthy' timing of births (22%)
- Ideal gap in age between children is 3 or more years (79%)
- Parity 0 want to wait +3 years after marriage before having their first child (mean: 4.2)
- · Parity 0 women don't desire teenage births (mean ideal age: 23.5)

Healthy approach to timing of births:

(12 Elevate their voice and attitudes about timing, as a positive example for other segments

GAPS

ENABLING NORMS

EXISTING FOUNDATIONS

- All have discussed FP (92%)
 - Haven't discussed FP with
- Most have discussed with 3 or more people (66%)
- ASHA or other health (96%) • Haven't discussed FP with
- friends (98%)

Very social and open about discussing FP with their immediate family:

(15) Create FP learning materials that can be discussed with family

SALIENCE

EXISTING FOUNDATIONS

- Pregnancy is not a problem (84%)
- Unsure about ideal timing of having a/next child (60%, p0 and p1)
- Lower unmet demand (16%)
- Unsure or doesn't intend to use FP (54%)

GAPS

Lack of urgency or desire about using family planning:

Encourage couples to build a fertility plan and to set goals, (16) focused around achieving spacing goals

AGENCY

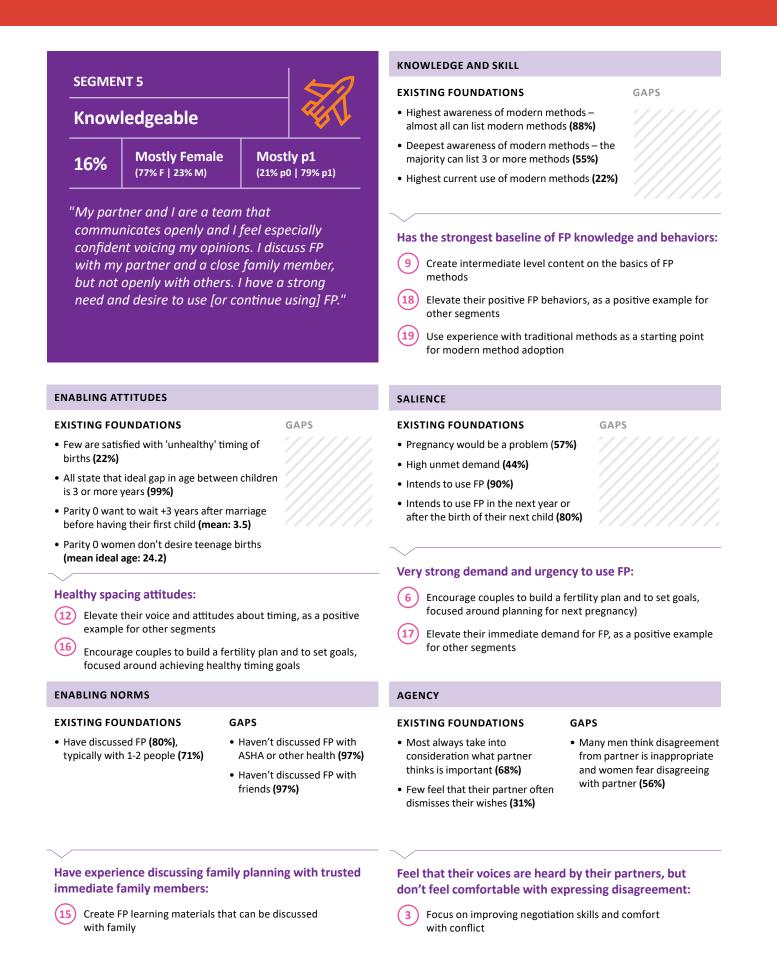
EXISTING FOUNDATIONS

- Most always take into consideration what partner thinks is important (63%)
- · Many men think disagreement from partner is appropriate and women don't fear disagreeing with partner (70%)
- · Few feel that their partner often dismisses their wishes (15%)

Open to disagreement, take into consideration partner's wishes, and feel that their partner also takes into consideration their own wishes:

(13 Introduce joint-counseling and decision-making sessions early on

Elevate their partner dynamic, as a positive example for 14 other segments





Classification Tool

The segmentation analysis we conducted is powerful in helping understand the various personas of young men and women and how best to tailor approaches to address them. However, once these tailored solutions are developed, there will be a need to classify men and women and to determine which of the five segments they fall into. While our final segmentation model utilized 19 active variables, it would be challenging to ask people to complete a survey of that length and with such sensitive questions. Fortunately, given the segment composition discussed above and the fact that each segment has a number of particularly strong characteristics, far fewer questions are required to classify a person into a segment.

By analyzing the active variables for the segments, we are developing a tool for the rapid classification of men and women into segments. This tool can be used by all partners but is primarily being designed for use by YUVAA Corps Members so they can adapt both their product offerings as well as their counseling styles and content to the needs of specific types of young men and women. The classification tool will be in the form of a brief survey, and will require responses to 5 questions at most questions at most, and will accurately (~80% accuracy overall) assess which segment a person is most likely to belong to. As segment-specific interventions are developed and deployed, YUVAA Corps program managers, trainers, and members will be able to use the classification tool to understand the men and women they reach out to and to better tailor their engagement to their distinct needs.

Strategy Implications

The results of segmentation can be used to inform YUVAA solutions at three levels:

1. SBCC/CONTENT CREATION

An in-depth understanding of each segment's attitudes and beliefs towards FP (as provided in the previous section) can be used to guide the development of tailored content that will address the specific triggers and barriers faced by each segment. Customizing content in this way will move beyond generic messaging and will, instead, maximize the probablity of potential positive behaviour change in each segment.

2. PROGRAM DEPLOYMENT

Other macro-level information about segments (e.g. segment composition, distribution across states, preferences with regard to outreach) can be used to identify priority audiences in each state (for SBCC interventions and from a market affordability perspective) and to plan strategic outreach efforts.

In general, the gender neutral nature of the segmention will help to ensure that both the development and deployment of materials will be relevant to the whole population rather than being gender specific.

3. TECHNOLOGY ADAPTATIONS

Last but not least, the insights on technology access and use can be used to identify sub-populations that are more likely to accept digital platforms and to help inform partner organizations as they attempt to strike a balance between IPC and digitial touchpoints for different populations.

SBCC/Content Creation

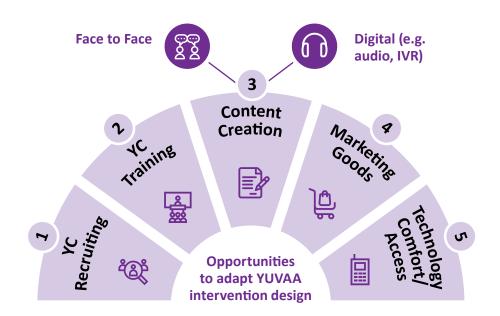
The segmentation analysis identified a number of key areas in which many couples are missing the foundational elements needed for behavior change. We hope to use these findings to develop customized content such that the key gaps for each segment are addressed through the content they receive. These key gaps can, in many cases, be addressed through a combination of targeted attitudinal shifts, skills building, and increased exposure and knowledge around FP. The current YUVAA interventions are well-placed to develop these foundations and we recommend that partners focus content development specifically on the key themes below. While each theme can be adjusted to fit different modalities and delivery channels, we believe that an effective approach will require reinforcement of messages across modalities. Couples will benefit from hearing information more than once and getting the chance to re-visit topics as needed.

Note: Given that YUVAA Corps members will be one of the primary touchpoints for YMCs receiving SBCC related content, the effectivness of behavior change will partially depend on the YUVAA Corps members ability to internalize the nuances of the content. As such trainings should focus heavily on ensuring they understand and internalize:

- The differences in needs across segments
- The key themes by segment
- How to accurately identify segments (by deploying the classification tool)
- Which topics to broach and in what order with different segments (given the levels of existing acceptance or lack thereof around a certain topic)



Applications of Analysis to YUVAA Solutions



Key themes for SBCC content creation include:

1

Improving Spacing Attitudes SEGMENTS 1, 2, 3

2 Improving Communications Dynamics SEGMENTS 1, 2, 3, 5

- Encouraging FP Dialogue and Discussion SEGMENTS 1, 2
- 4 Increasing Perceived Urgency of the Need to Use FP SEGMENTS 1, 2, 4
- 5 Enhancing Basic Education and Knowledge around FP Methods and Use SEGMENTS 1, 2, 4

1. Improving spacing attitudes

Both belief in healthy spacing (> 3 year spacing) and a strong commitment to the belief are important for YMCs to have the foundations for behavior change. Content should focus on introducing the idea of longer spacing, and sharing the many benefits of longer spacing. YUVAA needs to cement YMC commitment to healthy spacing through addressing questions or challenges, and then helping couples to plan proactively around how to make longer spacing a reality. Those segments that currently have positive spacing attitudes can also be encouraged to share their perspectives and to be role models for their peers who may not be as motivated to work towards longer spacing.

- Particularly important for segments 1 and 3 who don't generally believe in > 3 year spacing
- 2. Somewhat important for segment 2 who believes in healthy spacing but isn't strongly committed to it

2. Improving communication dynamics

Couple dynamics take into account a number of different elements. While men and women generally trust each other and partners believe they can solve big problems together, there is still room to improve partner listening skills, as well as the extent to which couples are comfortable disagreeing with each other. Increasing comfort with disagreement and framing negotiation in a positive light will make it easier for couples to talk about FP without fearing potential conflict, and will help to promote positive norms around joint decision-making related to FP.

- Particularly important for segments 1 and 3 who often feel dismissed by their partners and who don't always take their partners wishes into consideration
- Somewhat important for segments 2 and 5 who have strong relationship foundations but who don't necessarily feel comfortable expressing disagreeing views

3. Encouraging FP dialogue and discussion

In order to make it easier for couples to use FP, norms around the degree to which FP is considered a taboo topic will need to be changed. By making it possible for people to discuss FP both inside and outside of their family, and especially with their partners, we move couples in a direction towards normalizing FP more and more. While counter norms are often deeply entrenched and difficult to change, encouraging conversations about FP can be a step in the right direction. Those segments that currently speak openly within and/or outside of their families about family planning can also be encouraged to share their perspectives and to be role models for their peers who are less comfortable or familiar engaging in FP discussions.

 Particularly important for segments 1 and 2 who generally don't discuss FP with their partners, families, or healthcare workers and who need a forum for open conversation and to ask questions

4. Increasing perceived urgency of the need to use FP

While we know that many couples intend to use FP eventually, there is a need to focus on increasing clarity on why using modern methods could be beneficial for couples now as opposed to only when they have achieved their ideal number of children. Talking points include speaking about the benefits to a woman's health, the ability to dedicate resources to children when they are not born in rapid succession, or to the ability to gradually improve one's standard of living without adding the pressure of additional family members. The focus here should be less on increasing acceptance of FP (as many are already somewhat open to FP) but rather on promoting immediate action and use of modern methods today.

- 1. Particularly important for segment 4 for whom enabling attitudes exist, but action is not being taken
- 2. Also important for segments 1 and 2, but to a lesser extent since the first priority for these segments is the uptake of enabling attitudes

5. Enhancing basic education and knowledge around FP methods and use

A large majority of couples have limited knowledge and even more limited experience with FP methods. Giving people the opportunity to see different methods, to ask questions about them in a safe space and to feel empowered enough to choose a method that might work for them will be important in increasing their propensity to use. The current lack of familiarity with FP is something that can be addressed as an important starting point to changing behaviors.

1. Particularly important for segments 1, 2, and 4 who have limited knowledge and experience with FP

In summary, as the YUVVA program develops and refines content, partners should consider creating content specifically focused on teaching couples the basics of FP, the benefits of spacing, the different types of communication styles, the importance of listening within a relationship, how to increase comfort with partner disagreement, and finally the importance of having a sense of urgency around FP use. In addition to these considerations, there is an opportunity to improve couple openness to dialogue around FP – both with each other and with members of their community. By putting together audio programming in which people describe their own experiences with FP and in which they speak openly about their FP journeys, other less open couples may be motivated to also be more open about their own FP questions and desires.

Program Deployment

In terms of the best modalities through which to deliver information and provide skills building opportunities on the above key topics, a number of possibilities exist. In order to understand what modalities to use and how to effectively target priority audiences, it is important to understand some of the structural differences between segments, including, but, not limited to, their composition and distribution across states.

1. State-specific target audience considerations

While all segments can be found in both states, it is worth noting that some segments are significantly more prevalent in particular states. At a high-level, Bihar is largely comprised of segments 1, 2, and 3 with a very low prevalence of segments 4 and 5 (4% and 9% respectively of the total Bihar population), while Maharasthra is largely comprised of segments 2,3,4, and 5 with a very low prevalence of segment 1 (11% of the total Maharashtra population). As such, we would sugest that strategies for each state are weighted more heavily towards those segments that are more prvelant there.

For example, the Bihar strategy should account for the fact that the most likley segment to be found there is segment 1 (36% of the total Bihar population) and a Maharashtra strategy should account for the greater prevalence of segments 4 and 5 (30% and 21% respectively of the total Maharashtra population). Both Bihar and Maharashtra have similar distributions of segments 2 (25% and 20% respectively) and 3 (26% and 17% respectively) and those parts of their strategies can certainly overlap.

In thinking of particular considerations, state strategies should consider adapting to account for some of the key differences that the segment distribution implies, including:

- Lower literacy in Bihar (17% of segment 1 illiterate vs.3% each of segments 4 and 5)
- Lower current use of modern methods in Bihar (1% of segment 1 currently using vs.2% and 22% each of segments 4 and 5)
- Lower awareness of modern methods in Bihar (36% of segment 1 ever-used vs.38% and 88% each of segments 4 and 5)

At a high-level, the above suggests that segment 1 and Bihar overall, given the higher barriers to behaviour change, could be a more challenging starting point for YUVAA interventions. In addition, interventions deployed in Bihar (where there is a higher presence of a 'tougher segment') will likley need to be of higher intensity and frequency in order to be effective and will likely warrant additional provisions to accommodate low levels of literacy.

In considering the design of interventions in Maharashtra, per the above mentioned factors, interventions will need to consider the the somewhat higher levels of awarness and use (especially for segment 5). Our data also shows that in general, the likelihood of MILs living with couples is fairly high but that MILs are slightly more likley to be present in the home in Maharastra (90% of households report man's mother living there) than in Bihar (77% of households). This could indicate that interventions in Mahrashtra will need to more deeply consider the role of the MIL in the couple dynamic.

In thinking about overall aspirations, an ideal family size of two is the general norm across states but, in general, couples in Bihar will want slightly larger families (65% of Bihar couples state 2 or fewer children vs. 97% of Maharashtra couples) and interventions should factor in this predisposition by spending more time helping couples in Bihar to see the advantages of smaller families.

2. State-specific product mix considerations

In order to determine what items were of highest demand for the basket of goods that Yuvaa Corps members will be offering, we asked respondents in each state to answer the question 'I want to quickly understand some of your general needs and priorities. Which goods will you need over the next six months?' Note on methodolgy: Enumerators were instructed to initially not read options to respondents. This was done in order to get non-aided spontanous responses. Only after spontanesous responses were captured, did enumerators ask repondents about specifc items that they had not mentioned. In looking at spontaneous responses, the most commonly cited items were sanitary napkins (42% - women only), mobile phones (22%), diapers (21%), small appliances (18%), and nutrient additives (18%). While the top 5 items cited remained the same across states, there were considerable variations in their ranking across states:

- Sanitary napkins (67% vs. 18% in Bihar), mobile phones (55% vs. 16% in Bihar), and diapers (32% vs. 8% in Bihar) were of considerably more serious interest to people in Maharashtra
- Nutrient additives (29% vs. 5% Maharshtra) were of more serious interest to people in Bihar
- Small appliances garnered somewhat similar medium levels of interest across states (26% Bihar vs. 39% Mahrashtra)
- Pregnancy test kits (women only) were not commonly mentioned overall (and not in top 5) and they were

not of significant interest in Bihar (3%) however they were of considerably larger stated interest to women in Maharashtra (21%)

• Generally people in Maharashtra were better aligned with the items on the potential list of all items/ were better able to articulate which items they would want (only 13% of people in Maharashtra listed items 'other' than what was on the possible list for enumerators to check against, while 48% of people in Bihar listed items that were placed in the 'other' bucket by enumerators)

In considering the above state-specific preferences, we should also consider their overlap with segment-specifc preferences. In particular, segment 1 (highly prevalent in Bihar) expressed most interest in small appliances, segments 2 (similar prevalence in both states) and 5 (more prevalent in Maharashtra) expressed most interest in sanitary napkins, and segments 3 and 4 expressed most interest in cell phones (which will not be part of the current basket of goods so may be discounted for the moment).

As such, a cohesive initial product strategy might begin by prioritizing sanitary napkins, and small appliances in both states, nutrient additives specifically in Bihar, and diapers and (possibly) pregnancy kits in Maharashtra. In addition, YUVAA Corps members should be given a sense for the purchasing preferences of the different segments and should be trained on which product or set of products to use as an entry point for selling other goods.

3. Sub-population specific considerations

In thinking about how best to activate behaviour change, the YUVAA program is particularly interested in a number of subpopulations. Important considerations for a sub-set of these are included below.

FTPs vs. YMCs: In general, our data indicates that FTPs generally have slightly more knowledge (53% aware of modern methods vs. 47%) and are also more likley to have used modern methods than YMCs (23% vs. 6%). In addition, FTPs are far more likley to be current FP users than YMCs (5% vs. 1% in Bihar; 11% vs. 2% in Mahrashtra). As such, FTPs may require less education and persuasion (than YMCs) to use FP but, seemingly, still have a considerable ways to go. FTPs in particular tend to have a much higher sense of urgency around avoiding pregnancy than YMCs and that sense of urgency can be tapped to motivate them into action. This will be particularly true of segment 5 which has the highest proportion of p1 couples (79% of segment 5 is p1 vs. ~50% of other segments) and which is much more prevalent in Maharashtra than in Bihar.

Applications of Analysis to YUVAA Solutions

POSSIBLE CONSIDERATIONS	% OF WOMEN STATING A CONSIDERATION IS IMPORTANT (Preference expressesed by women)	% OF M CONSID (Prefere
Gender	38% (98% of whom prefer a woman)	34% (67% of
Age	14% (82% of whom prefer 'older than me')	31% (70% pr
Personality	27% (41% of whom prefer outgoing)	53% (62% of
Education	32% (96% of whoem prefer 'more edueducated than me')	71% (90% of educate

% OF MEN STATING A CONSIDERATION IS IMPORTANT (Preference expressed by men)

34% (67% of whom prefer a man)

31% (70% prefer of whom prefer 'older than me')

53% (62% of whom prefer outgoing)

71% (90% of whom prefer 'more) educated than me')

- Men vs. Women (beliefs/ attitudes): In both states, men are more social about FP (i.e. they talk to more people) than women are (59% of men have talked to 3+ people about FP vs. 18% of women). This is somehwat more true of men in Bihar who are more likley talk to their friends about FP, whereas men in Maharashtra are more likely to talk to healthworkers about FP. In addition, when it comes to intention, women generally have significantly stronger intentions to use FP than men - virtually all women want to use a method (96%) as compared to only about half of men (51%). This also plays out in men's and women's responses to whether FP is a sin or whether it's up to fate to decide how many children they have. In both cases, wome tend to disagree much more strongly (72% women vs. 39% men; 52% women vs. 18% men respectively) than men do with the statements. As such, in interacting with men, YUVVA interventions should tap into their socialness about FP but should also focus on helping them to develop an intention to use FP and/ or to support their wife's intention to use. It is worth noting that segments 2 and 3 in particular are heavily male-dominated (82% and 70% respectively) so these considerations may be particularly relevant in encounters with them. Men in these segments (and particularly in segment 3) could be particularly responsive to group meetings and to sharing their thoughts about FP in more public settings.
- Men vs. women (preferences on Yuvaa Corps): See the table above for responses to the question: 'If you were counseled by someone about private health matters, what things would you consider in selecting that professional?' In the table, we see that for both men and women, gender, personality, education, and age (to a lesser extent) are important. Men overall seem to place a particularly large emphasis on education and while women generally less frequently cite any considerations as important, gender was the most commonly cited imoprtant factor for them. In terms of specific preferences, people expressed a desire

to be counseled by someone of the same gender, who was more educated than them and who had an outgoing personality. Given how the question was aksed, we believe that the cited factors are expressed preferences and not neceassrily barriers (if not met). To the extent possible, however, it will be helpful to keep these considerations in-mind when recruiting potential corps members and in training them to reach out to couples.

Technology Adaptations

1. Access to technology

At a high-level, phone ownership and frequency of use is high across states with men (93% in Bihar; 96% in Maharashtra) generally having higher degrees of ownership than women (61% in Bihar; 66% in Maharashtra). The main access difference across states is that women without phones have fewer barriers to access in Maharashtra than in Bihar (of women who don't own a phone, 47% need permission to access in Bihar vs. 14% in Maharshatra).

With regard to type of phone, at a macro level, women across states will have convenient access to more basic content/ features, whereas men can more conveniently access apps. This is largely a result of the fact that:

- Men are more likley than women to own smartphones (40% of men in Bihar and 63% of men in Maharastra own smartphones vs. only 26% of women in Bihar and 35% of women in Maharastra)
- Women are more likley to own GSM phones (31% of women Bihar) or feature phones (47% of women Maharashtra).

In looking at segment-specific phone access, the majority of segments have high levels of access (69% and above) with the two more male-dominate segments (segments 3 and 4) having greater access than the other segments. As such, these two

segments, as well as men in Maharastra in general, seem like they could be the most promising targets for initial digitial outreach, especially if focused on smart phones.

2. Comfort with technology

As described in earlier sections, most people generally have access to phones and have a fair degree of digital literacy, with both men and women across states generally very comfortable dialing phone numbers. Across states, however, men do tend to do more with phones (incl. texting, listening to music and using apps) than women. In addition, poeple in Maharashtra, tend to use their phones more frequently for texting and listening to music than do people in Bihar. At a high-level, an initial digitalstrategy and associated roll-out might be configured as below in order to maximize impact, particularly for men, since they seem to have considerably more technology toupoints than women:

- Smartphone apps: Should be focused on men, especially those in Maharashtra since they own smartphones (63%) at a higher rate than men in Bihar(40%) and because more men in Maharashtra (64%) report being comfortable using apps than do men in Bihar (45%)
- Texting: Can be focused in either state but will likley gain more traction in Mahrashtra than in Bihar since both men and women in Maharasthra (51% men, 39% women) report more commonly using their phones for texting than their counterparts in Bihar (31% men, 11% women)
- Audio (recored content): Should likely be focused on men, especially those in Maharashtra since they report more commonly using their phones for listening to music than do women (73% men vs 38% women). A focus on men in Bihar could also be merited given they report using their phones to listen to music at fairly high rates as well (58% men vs 35% women). Audio outreach to women across both states (given lower stated use of phones for listening to music) will likley take more effort.
- Audio (phone call delivered content): Can likley be used across states and genders given high levels of access and also comofrt with simple phone calling features.



In looking at segment-specific comfort, in addition to the gender and state lenses applied above, segments 4 and 5 will likley be good targets for technologybased outreach. As mentioned, segment 4 which is largely comprised of men in Maharashtra tends to have high levels of access and ability. In addition, segment 5 which is largely comprised of women in Maharashtra also has high levels of access and reports)more commonly than other segments) using texting and smartphone apps.

Important Notes

Segmentation can be a powerful tool for understanding subpopulations and for customizing approaches to meet distinct needs. Understanding and then applying segment knowledge with fidelity will go a long way in promoting YUVAA's objectives and in both convincing and supporting couples to take on healthier timing and spacing practices.

As the findings from this report are internalized and implemented through partner interventions, it is important to note:

- The segmentation overall while intended to be representative of the whole population is anchored, and to some degree reflective of, the sample that was used to conduct research. All efforts were made to reduce bias but discrepancies in data can and should be further investigated
- The segmentation classification tool and its exact application by the YUVAA prgram will beed to be refined based on results of pilots in lab districts. Only after piloting should final decisions about individual level applications and/ or further refinements be made
- Segments overall can be an important tool for helping to prioritize resources and effort. For the purposes of testing out the program and maintaining YUVAA Corps motivation, if a sgement-anchored approach is fully deployed, it may be beneficial to focus initial efforts on segments 4 and 5 who are more amenable to behavior change and who may show more rapid positive gains than other segments. Depending on what overall objectives end up being and how partner interventions are planned, this could be an important area of discussion.
- The 5 segments unveiled in this report have been created with the understanding that people may move between segments as their own attitudes, behaviors and life circumstances change, but that the segment definitions themselves will not change considerably through the duration of the project. While it is always possible for entirely new segments to appear and for particular segments to completely disappear, these kinds of changes do not typically take place in the absence of a true shock to the overall system or without the passage of a significant period of time (e.g. decades over which entire sets of norms for a population may change). To track the stability and movement of segments, Camber highly recommends that implementers, as well as M&E efforts, consider classifying an individual more than once (e.g. three times: initially, after 6 months, and after a year).

Next Steps

The results from the segmentation analysis (as detailed in this report) were presented to YUVAA partners at an Integration workshop held in New Delhi in April, 2019. While partners appreciated the details and nuances of the segments, and of the attitudinal segmentation approach in particular, partners expressed a desire for more detailed data and guidance on how best to utilize the data from segmentation in the actual desgin and implementation of planned interventions.

In order to address these concerns, Camber has provided detailed cross-tabulations of key data as a supplement to this report. In addition, Camber will work closely with partners as interventions are designed and as challenges arise in order to problem solve and address them as effectively as possible.

We believe segmentation is a powerful approach to addressing behaviour change and we are excited for its application through the YUVAA partnership.

As partners begin to use the findings from this report, we at Camber our happy to help both in the interpretation and application of findings from this segmentation analysis. We look forward to further collaborating and are grateful to be a part of this important work.

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