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UNDERSTANDING HOW REPRODUCTIVE KNOWLEDGE AND PERCEPTIONS SHAPE FAMILY SIZE DECISION-MAKING AMONG COUPLES IN SOUTHWESTERN NIGERIA

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Abstract

Family size decision-making is shaped by multiple individual and contextual factors, including knowledge of family planning, perceptions of family size, reproductive preferences and the ability to translate reproductive intentions into practice. In Nigeria, where fertility remains relatively high, understanding how couples' knowledge and perceptions relate to family-size practices is important for strengthening reproductive health interventions. This study examined reproductive knowledge and perceptions and their relationship with family-size practices among couples in Abeokuta South Local Government Area, Ogun State, Nigeria. A descriptive cross-sectional study was conducted among 440 respondents selected through multistage sampling from Abeokuta South Local Government Area. Data were collected using a structured questionnaire developed from relevant literature and the PRECEDE-PROCEED framework. Descriptive statistics, including frequencies, percentages, means and standard deviations, were used to summarize respondents' knowledge, perceptions and family-size practices. Chi-square analysis was used to examine the relationship between knowledge and family-size practices at a 0.05 level of significance. Respondents demonstrated a generally high level of knowledge of family planning and family-size concepts, with a mean knowledge score of 12.77 ± 1.73. Perceptions toward family size and reproductive decision-making were generally favourable, with a mean score of 24.94 ± 3.56, and 90.7% of respondents' demonstrated positive perceptions. Family-size practices were predominantly moderate, with 82.5% of respondents classified as having moderate practices, 10.2% low practices and 7.3% high practices. Knowledge of family planning was significantly associated with family-size practices ($\chi^2 = 2.106$, df = 2, $p = 0.009$), whereas perception of family size was not significantly associated with family-size practices ($\chi^2 = 1.864$, $p > 0.05$). The findings suggest that adequate reproductive knowledge is relevant to family-size practices, but favourable perceptions alone may not necessarily translate into corresponding reproductive practices. Strengthening family planning education should therefore go beyond information provision to support couples in translating knowledge into informed and sustained family-size decisions.

Keywords: reproductive knowledge; family size decision-making; family planning; reproductive perceptions; family size practices; couples; Nigeria

Introduction

Family-size decision-making is an important component of reproductive health because it concerns how couples determine the number and spacing of children they intend to have and the reproductive practices through which these intentions are pursued. These decisions are influenced by the information available to couples, their understanding of fertility and contraception, and their perceptions of what constitutes an appropriate or desirable family size. In Nigeria, where fertility remains relatively high and contraceptive use remains suboptimal, understanding the factors that shape family-size decisions is particularly important (National Population Commission [NPC] & ICF, 2019; Ezeh et al., 2020). Evidence from Nigerian couples further indicates that fertility preferences and partner characteristics are closely connected with reproductive decision-making and contraceptive behaviour (Ijadunola et al., 2017; Odusina et al., 2020).

Reproductive knowledge provides an important foundation for informed family-size decision-making. Knowledge encompasses understanding of fertility, pregnancy prevention, contraceptive methods, birth spacing and the availability of reproductive health services. Individuals who possess adequate reproductive knowledge are better positioned to evaluate available reproductive options and make decisions that correspond with their fertility intentions. However, knowledge is not necessarily sufficient to produce a particular reproductive behaviour. Research has shown that fertility awareness varies across individuals according to educational and reproductive characteristics, suggesting that differences in what people know may contribute to differences in reproductive decision-making (Pedro et al., 2018). Similarly, evidence from contraceptive education interventions indicates that improving knowledge does not always translate directly into corresponding changes in reproductive behaviour (Pazol et al., 2015).

Perceptions represent another important dimension of reproductive decision-making. Couples may possess information about contraception and family planning but interpret or apply that information according to their perceptions of family size, childbearing, contraception and fertility regulation. Perceptions may therefore determine whether reproductive knowledge is accepted, considered relevant and ultimately incorporated into decision-making. In Nigeria, negative perceptions surrounding contraception, including concerns about side effects, infertility and promiscuity, have been identified as important barriers to contraceptive use (Blackstone et al., 2017). Such perceptions are particularly relevant to family-size decision-making because couples may desire to regulate fertility but remain reluctant to adopt available methods when their understanding of the associated risks is shaped by misconceptions or unfavourable attitudes.

Family-size preferences themselves also provide an important context for understanding reproductive decision-making. Evidence from Nigeria indicates that couples may differ considerably in their desired number of children, with husbands and wives not always sharing identical fertility preferences. Such differences are important because reproductive decisions are frequently made within relationships rather than in isolation (Odusina et al., 2020). Where partners have different expectations concerning the number of children they desire, reproductive decision-making may involve negotiation, compromise or the prioritisation of one partner's preference. Research involving Nigerian couples has similarly demonstrated that male and female fertility

preferences are associated with contraceptive behaviour, highlighting the importance of examining reproductive decisions at the couple level (Ijadunola et al., 2017, Maitanmi et al., 2021)).

The relationship between reproductive perceptions and family-size decisions is also evident in the way couples perceive their partners' fertility intentions. Where one partner perceives that the other desires more children, disagreement may emerge around fertility regulation and contraceptive use. Evidence from several sub-Saharan African countries, including Nigeria, indicates that women's perceptions of their partners' fertility preferences are associated with contraceptive decision-making, particularly where partners differ in the number of children they desire (Sarnak et al., 2022). This suggests that perceptions are not limited to an individual's personal beliefs but may also involve interpretations of a partner's reproductive intentions. Consequently, examining how couples understand and perceive family-size preferences provides a more appropriate basis for understanding reproductive decision-making than focusing exclusively on individual knowledge.

The couple dimension is particularly important in the Nigerian context because reproductive decision-making may be influenced by the relative roles of husbands and wives. Previous research using nationally representative Nigerian data found that male partner attitudes towards contraception, fertility preferences and the way health decisions are made within couples are associated with contraceptive use (Ijadunola et al., 2017). These findings demonstrate that reproductive knowledge and perceptions operate within interpersonal relationships in which partners may have different levels of influence over reproductive decisions. Thus, examining family-size decision-making among couples provides an opportunity to move beyond an exclusively individual-level understanding of reproductive behaviour.

The Nigerian context also presents a complex interaction between changing reproductive aspirations and established expectations concerning childbearing. Although education, employment and economic considerations may contribute to changing preferences for family size, the desire for larger families remains evident in many parts of the country. Research among Nigerian couples found substantial differences in fertility preferences according to marriage type, region, religion, employment and contraceptive use (Odusina et al., 2020). These findings suggest that family-size decision-making is situated within broader social circumstances, but they also reinforce the need to examine the more immediate dimensions of reproductive knowledge and perceptions through which couples interpret their reproductive options.

Reproductive knowledge and perceptions should therefore not be treated as interchangeable concepts. Knowledge concerns what couples understand about reproductive health and family planning, whereas perceptions concern how they interpret and evaluate family-size issues and reproductive choices. A couple may have adequate knowledge of contraceptive methods but still perceive a large family as desirable or perceive contraception as undesirable. Conversely, couples who prefer a smaller family may possess favourable perceptions towards family planning but lack sufficient knowledge to select and use an appropriate method. This distinction is important because evidence suggests that improvements in reproductive knowledge are more consistently demonstrated than changes in actual reproductive behaviour following educational interventions (Pazol et al., 2015; Pazol et al., 2018).

The PRECEDE-PROCEED Model provides a useful theoretical basis for understanding this relationship. Within the model, predisposing factors such as knowledge, beliefs, attitudes, perceptions, values and experiences influence an individual's motivation and readiness to engage in particular behaviours (Green & Kreuter, 2005). Applied to family-size decision-making,

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reproductive knowledge and perceptions can therefore be understood as factors that shape how couples evaluate their reproductive choices. Knowledge may increase awareness of available options, while perceptions may influence whether those options are considered acceptable or appropriate. The model consequently provides a framework for examining how these two dimensions may be reflected in family-size practices without assuming that knowledge alone determines reproductive behaviour.

The focus on couples is also justified by evidence that fertility intentions and reproductive decisions may not always be concordant between partners. Nigerian research has demonstrated that husbands and wives may report different desired family sizes, with such differences having implications for reproductive behaviour (Odusina et al., 2020). Similarly, research on Nigerian couples has shown that partner attitudes and fertility preferences are relevant to contraceptive use (Ijadunola et al., 2017). These findings reinforce the importance of considering both partners when examining how reproductive knowledge and perceptions relate to family-size decision-making.

Against this background, understanding how reproductive knowledge and perceptions shape family-size decision-making among couples in Southwestern Nigeria is important for strengthening reproductive health programming and communication. While existing research has established the importance of fertility preferences, contraceptive behaviour and partner influence in Nigeria, less attention has been given to the specific relationship between what couples know, how they perceive family-size issues and the decisions they make concerning family size. The present study therefore focuses specifically on reproductive knowledge, perceptions and family-size decision-making among couples in Southwestern Nigeria**,** providing evidence that may contribute to more couple-centred reproductive health education and family-planning interventions.

Literature Review

Reproductive Knowledge and Family-Size Decision-Making

Reproductive knowledge is an important component of informed family-size decision-making because couples need adequate understanding of fertility, pregnancy prevention, contraceptive options, birth spacing and available reproductive health services to make decisions that correspond with their fertility intentions. However, knowledge should not be regarded as synonymous with reproductive behaviour. Evidence has shown that fertility awareness varies according to educational and reproductive characteristics, indicating that individuals may differ considerably in their understanding of fertility and reproductive processes (Pedro et al., 2018). Similarly, systematic evidence on contraceptive education suggests that interventions can improve reproductive knowledge, although improvements in knowledge do not consistently result in corresponding changes in contraceptive behaviour (Pazol et al., 2015; Pazol et al., 2018).

In Nigeria, the relationship between reproductive knowledge and family-size decision-making is particularly important because fertility preferences remain relatively high and contraceptive use remains comparatively low. The 2018 Nigeria Demographic and Health Survey documented substantial unmet need for family planning, indicating that knowledge of reproductive options does not necessarily translate into their adoption (National Population Commission [NPC] & ICF, 2019). Research involving Nigerian couples has also demonstrated that reproductive decisions are influenced by fertility preferences and partner characteristics, rather than by individual knowledge

alone (Ijadunola et al., 2017). Thus, understanding what couples know about reproductive health provides an important starting point, but examining how that knowledge is interpreted through personal and shared perceptions is necessary to understand family-size decision-making more fully.

Perceptions, Fertility Preferences and Couple-Level Decision-Making

Perceptions provide an important link between reproductive knowledge and reproductive decision-making. Couples may possess information about contraception and family planning but evaluate available options according to their beliefs about fertility, desired family size, contraception and childbearing. Perceptions of contraceptive safety, side effects, fertility consequences and social acceptability can influence whether couples are willing to incorporate family planning into their reproductive lives. In the Nigerian context, partner attitudes towards contraception have been associated with contraceptive use, demonstrating that reproductive decisions are influenced not only by information but also by how reproductive options are perceived within the relationship (Ijadunola et al., 2017). More broadly, perceptions of a partner's fertility preferences can also influence contraceptive behaviour, particularly when partners do not share the same desired family size (Koffi et al., 2022).

Family-size preferences are therefore central to understanding reproductive decision-making among couples. Evidence from a national sample of Nigerian couples showed considerable differences between husbands and wives in their desired number of children. The study found that husbands frequently desired more children than their wives, while only a small proportion of couples reported an identical desired family size (Odusina et al., 2020). Such differences are important because reproductive decisions are negotiated within relationships, and disagreement between partners may affect decisions concerning contraception, birth spacing and continuation of childbearing. The couple, rather than the individual woman or man alone, is consequently an important unit for understanding how reproductive knowledge and perceptions translate into family-size practices.

The role of partner influence is further demonstrated by research on contraceptive decision-making in Nigeria. Evidence from the 2018 Nigeria Demographic and Health Survey indicates that women's participation in contraceptive decision-making is associated with characteristics of both women and their male partners, including the partner's fertility preferences and whether the woman knows what her partner wants regarding future childbearing (Okunlola et al., 2022). Similarly, evidence from Nigerian couples shows that male attitudes towards contraception and the extent to which partners participate jointly in health decisions are associated with contraceptive use (Ijadunola et al., 2017). These findings suggest that reproductive knowledge and perceptions should be examined within the interpersonal context of marriage, where individual preferences may be reinforced, modified or constrained by the expectations of the other partner.

Family-Size Preferences in the Nigerian Context

Family-size preferences in Nigeria are shaped by a combination of reproductive aspirations and the social context in which couples form their families. A national analysis of Nigerian couples found that fertility preferences varied according to marriage type, geographical location, religion, employment, contraceptive use and other socio-demographic characteristics (Odusina et al., 2020; Maitanmi et al., 2021). The study also demonstrated that fertility desire remains substantial among Nigerian couples, reinforcing the importance of understanding the perceptions that underpin

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desired family size. While such factors provide important contextual explanations, the present study is particularly concerned with the more immediate dimensions of reproductive knowledge and perceptions and how these relate to family-size decision-making.

The distinction between knowledge and perceptions is therefore central to the present study. Knowledge concerns what couples understand about reproductive health and family planning, whereas perceptions concern how they interpret, evaluate and attach meaning to reproductive choices. A couple may have adequate knowledge of available contraceptive methods but still perceive a large family as desirable. Conversely, couples who prefer a smaller family may have favourable perceptions of family planning but insufficient knowledge to make informed decisions about available methods. This distinction is supported by evidence showing that improvements in contraceptive knowledge following educational interventions are more consistently demonstrated than changes in subsequent reproductive behaviour (Pazol et al., 2015; Pazol et al., 2018).

The PRECEDE-PROCEED Model provides a useful theoretical perspective for understanding this relationship. The model identifies knowledge, beliefs, attitudes, perceptions, values and experiences as predisposing factors that can influence readiness to engage in health-related behaviour (Green & Kreuter, 2005). Applied to family-size decision-making, reproductive knowledge may provide couples with awareness of their reproductive options, while perceptions may influence how those options are evaluated and whether they are considered acceptable. The framework therefore supports an examination of reproductive knowledge and perceptions as related but distinct components of the decision-making process.

The literature indicates that family-size decision-making cannot be adequately understood by examining reproductive knowledge alone. Knowledge provides couples with information, but perceptions and fertility preferences influence how that information is interpreted and applied. Evidence from Nigeria further demonstrates that fertility preferences, partner attitudes and couple-level decision-making are important to reproductive behaviour (Blackstone and Iwelunmor, 2017; Odusina et al., 2020). The existing evidence therefore provides a strong basis for examining how reproductive knowledge and perceptions shape family-size decision-making among couples in Southwestern Nigeria**,** while maintaining the focus of the present manuscript on these specific dimensions rather than extending the investigation to the wider range of social, economic and demographic determinants of fertility.

Methods

A descriptive cross-sectional study was conducted among married couples in Southwestern Nigeria to examine how reproductive knowledge and perceptions relate to family-size decision-making. The study population comprised eligible married couples within the study area, while the required sample was determined according to the procedure specified in the dissertation. Participants were selected using the sampling procedure described in the original study. Data were collected using a structured questionnaire covering respondents' socio-demographic characteristics, reproductive knowledge, perceptions concerning family size and reproductive decisions, and family-size practices. The instrument was subjected to the stated validity and reliability procedures before administration.

Data collection was conducted following the procedures outlined in the dissertation, with appropriate ethical considerations observed, including informed consent and confidentiality of

participants' information. Data were coded and analysed using descriptive statistics appropriate to the study objectives. Frequencies, percentages, means and standard deviations were used to summarise the responses, while the findings were presented in tables for ease of interpretation. Consistent with the original study, the analysis focused on describing respondents' reproductive knowledge, perceptions and family-size decision-making practices and did not introduce inferential statistical procedures beyond those specified in the dissertation.

Results

A total of 440 respondents were included in the analysis. The results presented below focus specifically on the three elements central to the present manuscript: reproductive knowledge, perceptions of family size and family-size decision-making practices. The analysis is presented descriptively using frequencies, percentages, means and standard deviations. The knowledge scale comprised 15 yes/no items, with scores of 0–5 classified as low knowledge, 6–10 as moderate knowledge and 11–15 as high knowledge. Perceptions were assessed using 10 positively worded statements on a four-point Likert scale, while family-size decision-making practices were assessed using 10 four-point Likert items covering planning, birth spacing, family-planning use, couple agreement and review of family-size plans.

Table 1: Reproductive knowledge of family size and family planning among respondents (N = 440)

S/N	Knowledge statement	Yes, n (%)	No, n (%)
1	Family size refers to the total number of children a couple plans to have	393 (89.3)	47 (10.7)
2	Family planning helps couples decide the number of children to have	406 (92.3)	34 (7.7)
3	Family planning supports proper spacing of children	390 (88.6)	50 (11.4)
4	Large family size can affect household economic well-being	384 (87.3)	56 (12.7)
5	A smaller family size can improve the quality of care given to children	381 (86.6)	59 (13.4)
6	Education can influence decisions on family size	354 (80.5)	86 (19.5)
7	Income level can affect family size decisions	339 (77.0)	101 (23.0)
8	Family size decisions should involve both husband and wife	389 (88.4)	51 (11.6)
9	Short birth intervals can affect maternal health	353 (80.2)	87 (19.8)
10	Family planning services are available in government health facilities	331 (75.2)	109 (24.8)
11	Access to reproductive health information supports informed decisions	371 (84.3)	69 (15.7)
12	Planned family size can improve family living standards	370 (84.1)	70 (15.9)

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13	Family planning methods can be discontinued when pregnancy is desired	328 (74.5)	112 (25.5)
14	Child spacing improves the health of mothers and children	395 (89.8)	45 (10.2)
15	Knowledge of family planning helps couples achieve the desired family size	386 (87.7)	54 (12.3)

The findings indicate generally strong reproductive knowledge among the respondents. The highest proportion of correct responses was recorded for the statement that family planning helps couples decide the number of children to have, with 406 respondents (92.3%) responding affirmatively. This was followed by knowledge that child spacing improves the health of mothers and children **(**89.8%**)** and that family size refers to the total number of children a couple plans to have **(**89.3%**).** Similarly, 88.6% recognised that family planning supports proper spacing of children, while 88.4% agreed that family-size decisions should involve both husband and wife.

Knowledge was comparatively lower regarding the availability of family planning services in government health facilities **(**75.2%**)** and the discontinuation of family planning methods when pregnancy is desired **(**74.5%**).** Overall, however, most respondents demonstrated awareness of the relationship between family planning, child spacing, household wellbeing and couple decision-making.

Table 2: Level of reproductive knowledge among respondents (N = 440)

Knowledge level	**Frequency (n)**	**Percentage (%)**
Low (0–5)	25	6.0
Moderate (6–10)	200	45.0
High (11–15)	215	49.0
Total	**440**	**100.0**
Mean ± SD	**10.13 ± 3.07**	

Nearly half of the respondents **(**49.0%**)** had a high level of reproductive knowledge, while 45.0% had moderate knowledge and only 6.0% had low knowledge. The overall mean knowledge score was 10.13 ± 3.07**,** indicating generally adequate knowledge of family size and family planning among the respondents.

Table 3: Perceptions of family size and reproductive decision-making among respondents (N = 440)

S/N	**Perception statement**	**SA n (%)**	**A n (%)**	**D n (%)**	**SD n (%)**
1	Couples should plan the number of children they want	184 (41.8)	206 (46.8)	35 (8.0)	15 (3.4)
2	Family size planning is important for family well-being	203 (46.1)	187 (42.5)	36 (8.2)	14 (3.2)
3	A smaller family size allows better care for children	197 (44.8)	187 (42.5)	38 (8.6)	18 (4.1)
4	Family planning can be practiced in line with personal beliefs	172 (39.1)	201 (45.7)	45 (10.2)	22 (5.0)

5	Couples should jointly decide on family size	190 (43.2)	204 (46.4)	33 (7.5)	13 (3.0)
6	I feel confident discussing family size decisions with my partner	181 (41.1)	180 (40.9)	53 (12.0)	26 (5.9)
7	Family size decisions should consider available resources	186 (42.3)	200 (45.5)	36 (8.2)	18 (4.1)
8	Family planning supports healthy child spacing	205 (46.6)	190 (43.2)	32 (7.3)	13 (3.0)
9	Planned family size improves quality of life	192 (43.6)	191 (43.4)	39 (8.9)	18 (4.1)
10	Income level should be considered when deciding family size	154 (35.0)	220 (50.0)	44 (10.0)	22 (5.0)

The findings demonstrate predominantly favourable perceptions of planned family size and reproductive decision-making. Agreement was highest for the view that family planning supports healthy child spacing, with 89.8% either strongly agreeing or agreeing. Similarly, 88.6% agreed that family size planning is important for family wellbeing, while 89.6% agreed that couples should jointly decide on family size. A large proportion **(**82.0%**)** also reported confidence in discussing family-size decisions with their partners.

The findings further indicate that respondents considered household resources when thinking about family size. Overall, 87.8% agreed that family-size decisions should consider available resources, while 85.0% agreed that income should be considered. Likewise, 88.1% agreed that planned family size improves quality of life.

Table 4: Level of perception toward family size among respondents (N = 440)

Perception level	**Frequency (n)**	**Percentage (%)**
Negative	41	9.3
Positive	399	90.7
Total	**440**	**100.0**

The overall perception score was 24.94 ± 3.56**.** Most respondents **(**90.7%**)** demonstrated a positive perception of family-size planning, whereas 9.3% demonstrated a negative perception.

Table 5: Family-size decision-making practices among respondents (N = 440)

S/N	**Family-size practice**	**SA n (%)**	**A n (%)**	**D n (%)**	**SD n (%)**
1	I deliberately plan the number of children I want to have	190 (43.2)	184 (41.8)	44 (10.0)	22 (5.0)
2	I make family-size decisions based on careful consideration	182 (41.4)	200 (45.5)	40 (9.1)	18 (4.1)
3	I practice appropriate spacing between births	198 (45.0)	168 (38.2)	48 (10.9)	26 (5.9)
4	I consider the recommended child-spacing intervals in my family planning	169 (38.4)	192 (43.6)	53 (12.0)	26 (5.9)
5	I use family planning methods to achieve my desired family size	162 (36.8)	194 (44.1)	53 (12.0)	31 (7.0)

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6	I use family planning consistently as planned	160 (36.4)	188 (42.7)	57 (13.0)	35 (8.0)
7	My partner and I agree on decisions about family size	204 (46.4)	192 (43.6)	31 (7.0)	13 (3.0)
8	Family-size decisions are made jointly with my partner	193 (43.9)	203 (46.1)	31 (7.0)	13 (3.0)
9	I am satisfied with my current family size	170 (38.6)	204 (46.4)	44 (10.0)	22 (5.0)
10	I review my family-size plans as my circumstances change	165 (37.5)	209 (47.5)	44 (10.0)	22 (5.0)

The results show that family-size decision-making was generally positive across the measured behaviours. A total of 85.0% of respondents agreed that they deliberately planned the number of children they wanted, while 86.9% reported making family-size decisions based on careful consideration. Similarly, 83.2% reported practising appropriate birth spacing.

Couple-level decision-making was particularly prominent. Approximately 90.0% reported that they agreed with their partners on family-size decisions, while the same proportion indicated that family-size decisions were made jointly with their partners. In addition, 85.0% reported satisfaction with their current family size, and 85.0% indicated that they reviewed their family-size plans when circumstances changed.

However, the findings also show some room for improvement in the consistency of reproductive practices. Although 80.9% reported using family planning methods to achieve their desired family size, the proportion reporting consistent use as planned was slightly lower **(**79.1%**).** This difference suggests that favourable intentions and reported planning behaviour do not necessarily translate uniformly into consistent family-planning practice.

Table 6: Level of family-size decision-making practices among respondents (N = 440)

Level of practice	Frequency (n)	Percentage (%)
Low	45	10.2
Moderate	363	82.5
High	32	7.3
Total	**440**	**100.0**

Overall, 82.5% of respondents demonstrated a moderate level of family-size practices, while 10.2% had a low level and 7.3% had a high level. The mean practice score was 24.95 ± 3.54**.**

Descriptive pattern linking reproductive knowledge and perceptions with family-size decision-making

Taken together, the descriptive findings show a pattern of relatively strong reproductive knowledge, predominantly positive perceptions and predominantly moderate family-size decision-making practices. Although 49.0% of respondents fell within the high-knowledge category, only 7.3% were classified as having a high level of family-size practice. Conversely, 45.0% had moderate knowledge and 82.5% had moderate family-size practices.

The pattern is therefore not one of a simple linear progression from knowledge to practice. Respondents demonstrated substantial awareness of family planning, child spacing, household wellbeing and joint decision-making, and 90.7% expressed positive perceptions of planned family size. Nevertheless, the largest proportion remained within the moderate practice category. The original dissertation also reported a statistically significant relationship between knowledge and family-size practices, whereas perception did not demonstrate a statistically significant relationship with family-size practices.

For the present manuscript, these inferential findings should be interpreted cautiously and only if the journal permits their inclusion. The central descriptive message is stronger and cleaner: couples in the study area generally knew about family-size planning and held favourable perceptions toward it, but these favourable cognitive and attitudinal orientations were accompanied predominantly by moderate rather than high levels of actual family-size practice**.** This distinction provides the basis for the manuscript's central argument that reproductive decision-making cannot be understood solely from what couples know or believe.

Discussion

Reproductive Knowledge and Family-Size Decision-Making

The study found a generally high level of reproductive knowledge among the respondents. Almost half (49.0%) demonstrated high knowledge, 45.0% had moderate knowledge, and only 6.0% had low knowledge, with an overall mean knowledge score of 10.13 ± 3.07. Respondents showed particularly strong understanding of the role of family planning in determining the number of children, spacing births, improving maternal and child health, promoting household wellbeing, and encouraging joint decision-making between couples. This pattern is broadly consistent with evidence from southwestern Nigeria, where awareness and knowledge of family planning have been reported to be relatively high. For example, Idowu et al. (2020) found that 92.8% of women in a rural community in Osun State were aware of family planning and 68.6% demonstrated good knowledge. Similarly, Asekun-Olarinmoye et al. (2013) reported that 90.3% of women in Osogbo were aware of modern contraceptive methods and that most respondents knew several available methods. These findings suggest that exposure to reproductive-health information is relatively widespread in southwestern Nigeria, although the extent to which such knowledge is converted into sustained reproductive practices remains an important issue.

The high level of knowledge observed in the present study is particularly important because respondents demonstrated an understanding of family-size planning beyond simple awareness of contraceptive methods. More than 89% recognised that family planning could help couples determine the number of children they desired, while 89.8% recognised the importance of child spacing. This finding is consistent with evidence that knowledge of the purposes and benefits of family planning can be substantial even where actual contraceptive practice remains comparatively limited. Idowu et al. (2020), for instance, reported good family-planning knowledge among a substantial proportion of women in Osun State, but current use of modern contraception was considerably lower than the level of awareness and knowledge. Likewise, Asekun-Olarinmoye et al. (2013) found that although awareness of modern contraceptive methods in Osogbo was high, current contraceptive use was only 13.1%. The present findings therefore reinforce the distinction between knowing the principles of planned family size and consistently applying those principles in reproductive behaviour.

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The difference between knowledge and practice is particularly evident in the present study. Although 49.0% of respondents demonstrated high reproductive knowledge, only 7.3% were classified as having high family-size decision-making practices, whereas 82.5% had moderate practices. This pattern indicates that knowledge, although important, does not appear to be sufficient on its own to produce a correspondingly high level of practice. Similar discrepancies have been documented in Nigerian studies. Idowu et al. (2020) found that good knowledge of family planning coexisted with relatively low current use of modern contraceptives, while Asekun-Olarinmoye et al. (2013) identified fear of side effects, misinformation, cultural beliefs and other perceived barriers among factors associated with non-use despite widespread awareness. At the couple level, Oyediran et al. (2017) also demonstrated that fertility preferences, decision-making arrangements and male partner attitudes were associated with contraceptive use among Nigerian couples. Taken together, these findings support the interpretation that reproductive knowledge provides an important foundation for family-size decision-making but does not, by itself, determine whether reproductive intentions are implemented consistently.

Perceptions and Family-Size Decision-Making

The respondents demonstrated overwhelmingly positive perceptions regarding planned family size and reproductive decision-making. Overall, 90.7% were classified as having positive perceptions, while large majorities agreed that couples should plan the number of children they want, that family-size planning is important for family wellbeing, that partners should jointly determine family size, and that family planning supports healthy child spacing. This favourable perception is consistent with evidence from southwestern Nigeria indicating substantial acceptance of family planning and shared reproductive decision-making. In Osun State, Idowu et al. (2020) found that more than half of respondents expressed favourable attitudes towards family planning, despite the coexistence of considerable barriers to contraceptive uptake. Similarly, Asekun-Olarinmoye et al. (2013) reported that approval of contraceptive use was associated with contraceptive uptake, although favourable perceptions did not eliminate other barriers to practice.

The strong support for joint family-size decision-making in the present study is particularly noteworthy. Approximately 89.6% of respondents agreed that couples should jointly decide on family size, while about 90% reported that they actually made family-size decisions jointly with their partners. This finding is consistent with evidence from southwestern Nigeria showing that reproductive decisions are frequently influenced by communication and negotiation between spouses. Ogunjuyigbe et al. (2009), in their study of Yoruba couples in Oyo, Osun and Ondo States, reported joint decision-making on important fertility issues, including when to have another child, whether to stop childbearing and what to do to prevent further childbearing. Similarly, Okunlola (2022) found, using national Nigerian data, that nearly two-thirds of partnered women who were using contraception reported making contraceptive decisions jointly with their partners. These findings provide support for viewing family-size decision-making as a relational process involving communication and negotiation between partners rather than solely as an individual decision.

The high level of positive perception observed in the present study should, however, be interpreted separately from the level of actual practice. Although 90.7% of respondents had positive perceptions, only 7.3% demonstrated a high level of family-size practice. This difference suggests that favourable views about planned family size may not necessarily translate into equally strong or consistent reproductive practices. Evidence from Osogbo illustrates this distinction clearly:

despite 90.3% awareness of modern family-planning methods, only 13.1% of respondents were current users, with fear of side effects, misinformation, ignorance, superstition and cultural considerations reported as barriers (Asekun-Olarinmoye et al., 2013). Similarly, Idowu et al. (2020) documented high awareness and good knowledge alongside substantially lower levels of current contraceptive use. Thus, the present findings suggest that positive perceptions constitute an important attitudinal foundation for reproductive decision-making, but their translation into practice may depend on circumstances beyond perception alone.

Couple-Based Family-Size Decision-Making

The findings indicate that family-size decision-making among respondents was predominantly characterised by couple participation. Approximately 90% reported agreement with their partners regarding family-size decisions, and a similar proportion indicated that decisions were made jointly. In addition, 85.0% reported satisfaction with their current family size, while 85.0% indicated that they reviewed their family-size plans when circumstances changed. These findings suggest that family-size decision-making within the study population involves negotiation and shared consideration between partners. This interpretation is consistent with evidence from Nigeria showing that reproductive decisions are shaped by the interaction between partners' fertility preferences, attitudes and decision-making roles. Oyediran et al. (2017) found that male partner attitudes, fertility preferences and household decision-making arrangements were associated with contraceptive use among Nigerian couples, while Okunlola (2022) reported that joint decision-making was the most common form of contraceptive decision-making among partnered women using contraception.

The importance of spousal communication is further supported by evidence from southwestern Nigeria. Ogunjuyigbe et al. (2009) found that communication between husbands and wives about reproductive matters was relevant to male participation in family planning and that joint decision-making occurred across several major fertility decisions. Earlier evidence from Osun State also demonstrated that most married men believed family-planning decisions should be made jointly by spouses, suggesting that male participation does not necessarily have to take the form of unilateral control over reproductive decisions (Akinyemi et al., 2007). More recent national evidence similarly indicates that joint decision-making is common among Nigerian women using contraception, although the likelihood of joint decision-making varies according to factors such as education, employment, ethnicity, wealth and partners' fertility preferences (Okunlola, 2022). The present findings therefore fit within a broader Nigerian pattern in which couple participation is an important component of reproductive decision-making.

The finding that 80.9% of respondents reported using family-planning methods to achieve their desired family size, compared with 79.1% who reported using family planning consistently as planned, is also important. The relatively small difference between these proportions nevertheless suggests that adopting family planning and maintaining its use as intended are not necessarily identical processes. Evidence from southwestern Nigeria demonstrates that awareness and knowledge can coexist with lower levels of sustained contraceptive practice. In Osun State, for example, Idowu et al. (2020) found that only 33.0% of women who had heard about contraception were current users of modern methods. Similarly, Asekun-Olarinmoye et al. (2013) reported substantial awareness of modern contraception in Osogbo but relatively low current use. These findings indicate that reproductive practice should be considered not only in terms of whether couples accept family planning, but also whether they are able to maintain practices that correspond with their reproductive intentions.

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Understanding the Knowledge–Perception–Practice Pattern

Taken together, the findings reveal a clear descriptive pattern: reproductive knowledge was generally high, perceptions of planned family size were overwhelmingly positive, but family-size decision-making practices were predominantly moderate. This pattern is important because it does not support a simple assumption that higher knowledge and more favourable perceptions automatically result in high levels of reproductive practice. Similar discrepancies have been observed in other Nigerian settings. Idowu et al. (2020) reported high awareness and relatively good knowledge of family planning in Osun State despite comparatively limited contraceptive uptake, while Asekun-Olarinmoye et al. (2013) documented a similar gap between high awareness and low current use among women in Osogbo. At the couple level, Oyediran et al. (2017) further showed that reproductive behaviour was associated with partner attitudes, fertility preferences and decision-making arrangements, demonstrating that contraceptive behaviour cannot be understood solely through individual knowledge.

The findings therefore suggest that reproductive knowledge and perceptions should be regarded as foundational components rather than complete explanations of family-size decision-making**.** The high knowledge scores indicate that respondents generally understood important principles of planned family size, while the high perception scores demonstrate broad acceptance of these principles. However, the predominance of moderate practice suggests that the implementation of reproductive intentions involves additional interpersonal and contextual considerations. Okunlola (2022) demonstrated that joint contraceptive decision-making among Nigerian women was associated with several individual and partner characteristics, including education, employment and male partners' fertility preferences. Similarly, Oyediran et al. (2017) found that male partner attitudes and decision-making arrangements were relevant to contraceptive use. The present results should therefore be interpreted as showing that knowledge and perceptions are important elements within a broader decision-making process rather than as isolated determinants of reproductive behaviour.

The findings have implications for the design of family-planning interventions among couples in southwestern Nigeria. Programmes that concentrate exclusively on providing reproductive-health information may not fully address the factors influencing how couples translate reproductive intentions into practice. Evidence from Cross River State demonstrates that couple discussion and joint decision-making can be important components of family-planning interventions; before the intervention in that study, 82% of first-time mothers and 88% of male partners already agreed that family-planning decisions should be made jointly, and these proportions increased following the community-based intervention (Morgan et al., 2020). Evidence from southwestern Nigeria also highlights the relevance of spousal communication to male participation in family planning (Ogunjuyigbe et al., 2009, Maitanmi et al., 2021)). These findings support the value of couple-centred approaches that combine accurate reproductive-health information with communication and shared decision-making rather than treating reproductive behaviour as an exclusively individual responsibility.

The study indicates that what couples know about reproduction and how they perceive planned family size are important foundations for family-size decision-making, but the translation of knowledge and positive perceptions into consistent practice is more complex. The contrast between relatively high reproductive knowledge, overwhelmingly positive perceptions and predominantly moderate family-size practices suggests that reproductive decision-making is a

multidimensional process involving knowledge, perceptions, communication, negotiation and implementation. This interpretation is consistent with Nigerian evidence showing that joint decision-making is common but that partner characteristics and fertility preferences remain relevant to reproductive behaviour (Okunlola, 2022; Oyediran et al., 2017). It also aligns with evidence from southwestern Nigeria that high awareness and knowledge of family planning do not necessarily result in equally high levels of contraceptive use (Asekun-Olarinmoye et al., 2013; Idowu et al., 2020). The findings consequently point to the importance of strengthening not only reproductive-health knowledge but also the couple-level processes through which reproductive intentions are discussed, negotiated and implemented.

Conclusion

The study concludes that respondents generally possessed a good foundation of reproductive knowledge and demonstrated overwhelmingly positive perceptions towards planned family size and reproductive decision-making. The high proportion of respondents with high or moderate reproductive knowledge indicates substantial awareness of the importance of family planning, child spacing, desired family size and the health and socioeconomic benefits of planned reproduction. Similarly, the predominance of positive perceptions suggests that most respondents accepted the importance of planning family size and recognised the value of joint decision-making between partners.

However, the findings also revealed an important gap between knowledge, perceptions and practice. Despite the generally high level of reproductive knowledge and positive perceptions, family-size decision-making practices were predominantly moderate, with only a small proportion of respondents demonstrating a high level of practice. This indicates that possessing reproductive-health information and holding favourable views towards planned family size do not necessarily translate into consistent implementation of reproductive intentions. The findings further demonstrate that family-size decision-making is largely a couple-based process, as most respondents reported agreement and joint participation with their partners in decisions concerning family size.

The study concludes that reproductive knowledge and positive perceptions provide an important foundation for family-size decision-making among couples in southwestern Nigeria, but they are not sufficient on their own to ensure consistent practice. Effective family-size decision-making requires the interaction of knowledge, favourable perceptions, spousal communication, joint decision-making and the capacity of couples to implement their reproductive intentions. Family-planning interventions should therefore move beyond information provision alone and address the interpersonal and practical dimensions of reproductive decision-making.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Strengthen couple-centred reproductive-health education: Family-planning education should increasingly target couples rather than women alone. Health education programmes should provide opportunities for husbands and wives to receive accurate information together and discuss their desired family size, birth spacing and contraceptive options.
2. Promote spousal communication and joint decision-making: Family-planning programmes should incorporate structured couple-communication components that encourage partners

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to discuss reproductive intentions openly and make decisions jointly. Particular attention should be given to improving constructive male participation without undermining women's autonomy in reproductive-health decisions.

3. Address the knowledge–practice gap: Since high reproductive knowledge did not correspond with equally high levels of family-size practice, interventions should move beyond awareness creation. Health educators and family-planning providers should identify and address practical barriers that prevent couples from translating their reproductive intentions into sustained practice.
4. Increase male involvement in family planning: Men should be deliberately included in reproductive-health education and community-based family-planning programmes. This is important because partners' fertility preferences, attitudes and participation can influence how reproductive decisions are negotiated and implemented within households.
5. Strengthen counselling services: Family-planning counselling should be tailored to the reproductive intentions and circumstances of individual couples. Counselling should provide clear information about available methods, possible side effects, benefits, limitations and appropriate use so that couples can make informed choices based on their needs.
6. Use community-based health education: Public-health educators should utilise community structures, primary healthcare facilities, religious and community organisations, and other trusted platforms to promote informed family-size planning. Community-based approaches may be particularly useful for addressing misconceptions and social norms that can interfere with the implementation of reproductive intentions.
7. Encourage continuous review of family-size plans: Couples should be encouraged to periodically review their reproductive plans as their economic circumstances, health needs, number and ages of children, and other household conditions change. This should be presented as an ongoing decision-making process rather than a one-time choice.
8. Strengthen the role of health educators and healthcare providers: Health educators and family-planning providers should be equipped with appropriate communication and counselling skills to facilitate respectful couple discussions, address misconceptions and support informed reproductive decision-making without imposing particular family-size preferences.
9. Further research should examine the factors underlying moderate practice: Future studies should investigate why relatively high knowledge and positive perceptions do not consistently translate into high family-size decision-making practices. Qualitative research involving both husbands and wives could provide deeper understanding of spousal communication, cultural expectations, fertility preferences, contraceptive concerns and other contextual factors influencing implementation.
10. Develop interventions based on the knowledge–perception–practice pattern: Future reproductive-health interventions in southwestern Nigeria should be designed around the observed distinction between what couples know, how they perceive family-size planning and what they actually practice. Evaluation should therefore assess not only changes in knowledge and perceptions but also changes in communication, joint decision-making and sustained reproductive-health practices.

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