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Impact of perceptions about children and procreation on family-planning practices

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Objective: The present study looks at how family-planning (FP) practices might be influenced by perceptions about children and procreation. We hypothesised that adding the perceived value of children and procreation to Ajzen's 1985 model would improve its predictive power. **Method:** Two hundred and seventy Nigerian women, 120 living in an urban area and 150 living in a rural area, answered a questionnaire about their use of FP. The questionnaire contained items assessing the variables found in Ajzen's model (attitude, perceived control, subjective norms, intention) as well as items assessing perceptions about children and procreation. **Results:** The results confirmed that child-related perceptions improved predictions for both rural and urban women (improvements of 2.4% and 2.8%, respectively). They also had an effect on FP practices. More specifically, the more positive a woman's perceptions of children, the less inclined she was to engage in FP. **Conclusions:** Recommendations are made in view of taking this variable into account in FP promotion programmes.

Keywords: family planning; perceptions about children; procreation; theory of planned behaviour

Introduction

Family planning (FP) is a necessity for many countries around the world and especially for developing countries in Africa such as Niger. FP was initiated in Niger in 1975 mainly for economic and health reasons (INS & Macro International Inc., 2007). In Niger, FP concerns both spacing and limiting births. After more than 37 years of promotional campaigns, it seems that FP is not much practised, despite the availability and variety of modern contraceptives. The number of children per woman is one of the highest fertility rates in the world (7.5 in 1998; Policy project, 2005). We believe that the value placed on children and procreation as a socially shared belief in Niger can be a decisive element in this respect. This article examines how the perception about children and procreation may affect the decision to make use of FP. We start by outlining the theoretical bases and research goals, describing the probable link between the value assigned to the child and procreation and showing how it could affect the practice of FP. Then the study methodology, results and their discussion are presented as well as their theoretical and practical implications.

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Do perceptions and valorisation of children explain high birth rates?

The idea of explaining high demographic growth rates in terms of the value people attribute to children has been explored by several authors in various countries (Bühler, 2008; Bulatao, 1979; Gerrits, 1997). Most of these studies have used the Value of Children scale (VOC) designed for this purpose following the work of Fawcett (1972) and Hoffman and Hoffman (1973). The VOC has been validated by several authors (Bulatao, 1979; Nauck & Klaus, 2007). Bulatao (1979) compared pro-child values in countries with high and low fertility rates (seven Asian and two Western countries). He identified three types of child-related values that explained the desire to have children. The values that accounted for high birth rates were: instrumental values (help with household chores, assistance in old age, financial and practical support, perpetuation of lineage, religious or social obligations, social status and norms), values linked to rewarding interactions with children (socio-emotional rewards, companionship, love, happiness, etc.), and values related to the psychological impact of having children on the parents (living through children, achievement, power, fulfilment, etc.). On the other side, Bulatao (1979) explained the fertility decline by seven factors: greater availability and effectiveness of contraceptives, late marriage, reduced child mortality, higher aspirations (better quality of life for both parents and children), disappearance of economic roles for children, emergence of the nuclear family, and weakening of 'cultural' and social support for high fertility.

In their cross-national study, Arnold et al. (1975) noted that expectations in terms of financial assistance and support from children when the parents get older were stronger in rural areas than in urban ones. This finding was confirmed by Albert, Trommsdorff, Mayer and Schwarz (2005), in their study on the value of children in Indonesia. Moreover, Bühler (2008) showed in Bulgaria that fertility intentions were based on the idea that the prospect of the child's arrival will bring the parents and family closer together, or improve security in old age. In South Korea, Kim, Park, Kwon and Koo (2005) showed 'that psychological benefits (love, joy, companionship, satisfaction) are the most important reasons for having a child and personal and financial constraints are the most important reasons for not having a child' (p. 339).

Little systematic research on the values conveyed by child-related perceptions has been conducted in Africa. However, a few studies carried out in certain African countries have shed some light on this question. In a study in South Africa, Sam, Peltzer and Mayer (2005) pointed out that perceptions about children rooted in utilitarian values were positively linked to the desired number of children. Likewise, Dyer, Abraham, Mokoena and Van der Spuy (2004) found that not having children was considered to lower one's social status, and that having children was a source of esteem. Gerrits' (1997) studies in Mozambique and that of Runganga, Sundby and Aggleton (2001) in Zimbabwe showed that childless individuals are left out of cultural activities. Similarly, Sarpong (1977) added that among the Akan people¹ in general, sterility is the worst calamity that can befall an adult, and it may lead to divorce (cited by Sam, Amponsah, & Hetland, 2008, p. 523). Finally, according to Nsameng (1994), in Western Africa and Cameroon 'pregnancy signifies divine blessing and a child is seen as God's gift "given" through the meditative approval of ancestral spirit' (cited by Sam et al., 2008, p. 523). The spiritual value of children was confirmed in a study conducted in Ghana by Sam et al. (2008).

The spiritual dimension refers to the beliefs of ancestors and their impact on the lives of those still living.

Perception about children and procreation as a curb on family planning in Niger

In the present study, we predicted that cultural and social values and beliefs about children and procreation would have both a direct and an indirect impact on FP practices. The first assumption, supported by authors like Sanders and Baron (1977), posits that people who are members of a group change their mind because they want to conform to socially desirable norms and values. Hence, a view of children that sees them as valuable is likely to directly influence FP practices. The second assumption, based on the indirect role of values, translates into the idea that when combined with other factors such as attitudes, subjective norms, or perceived control, perceptions about children will influence FP intentions and practices among Nigerian people.

In Niger, FP programmes have been in place since 1975. Since 2002, contraceptives have been provided free in Niger, distribution has been outsourced and some radio programmes promoting FP have been launched. However, despite considerable progress in providing expanded reproductive health services in recent years, contraceptive prevalence remains low: 11% of married Nigerian women aged 15–49 and fewer than half (5%) relied on a modern method, generally oral contraceptives or the IUD (Potts, Gidi, Campbell, & Zureick, 2011, p. 95). Among the most common reasons given for non-use were the social value of procreation, desire for children or desire for more children, etc. (Nomaou & Harouna, 2007). ‘In 2006, married women and men reported wanting an average of 8.8 and 12.6 children, respectively’ (Potts et al., 2011, p. 95).

In our minds, social and cultural values, which constitute factors affecting behaviour, are at the core of this situation. Here, we are particularly interested in values likely to valorise procreation and thereby cast a highly positive and coveted light on children. In Niger, as in some of the other countries mentioned above (South Korea, Ghana, Indonesia), having children brings with it a certain pride, guarantees the perpetuation of the family and oneself, and accords social recognition and distinction (Albert et al., 2005; Kim et al., 2005, Sam et al., 2008). The more children the family or clan has, the more respected and well-regarded it is. In contrast, not having children is experienced as a shameful tragedy for individuals of childbearing age and for their families as well. In Niger, having children represents a psychological accomplishment, that of being capable of reproduction, of having served a purpose by perpetuating the lineage. It fulfils a non-negligible utilitarian function for the parents (help with household tasks, support in old age, help in the fields or pastures, etc.).

Based on these considerations, the present study looks into how perceptions about children and procreation, affect FP practices in Niger. In particular, we think that the low level of participation in FP in that country is influenced by perceptions that valorise the child and procreation. We refer to Ajzen’s (1985, 1991) theory of planned behaviour (TPB), which has been widely used for many years in studies on behavioural change. This theory postulates that the main determinant of behaviour is the intention to act, which is in turn determined by attitude, subjective norms and perceived control. We set out to show that perceptions about children and procreation can help predict FP practices – in the same manner as can attitude,

subjective norms, perceived control and intention – and that one can improve predictions of behaviour, as shown by Ajzen (1991) and Beck and Ajzen (1991), by introducing a specific measure of behaviour in the TPB model.

We postulated, first, that perceptions about children and procreation would influence family-planning practices in Niger, along with attitude, subjective norms, perceived control, and intention; and second, that adding perceptions about children and procreation would improve the predictive power of the TPB model.

Method

The research method was a quantitative survey using a questionnaire designed by the authors. We first present the participants, then data collection instruments and lastly the procedure of data collection.

Participants

The participants in the study were 270 women of childbearing age. We focused on women because they are the first to be concerned with procreation and with FP policies, even though it is difficult to discount the husband's role. Participants were chosen randomly after responding to an advert for literate women, or after a meeting with women at home for non-literate women. Participation in the study was voluntary and unpaid. The inclusion criteria were being female and willing to participate in the study. The participants were divided into two groups, one of 150 rural women with no schooling and one of 120 urban women who had received an education. The age of the rural women ranged from 20 to 51 years with an average of 30 years (SD 5.24). The age of urban women ranged from 18 to 34 years with an average of 24 (SD 2.4). All participants had access to a health centre and to free birth-control pills and condoms. All respondents said they did not use any modern method of contraception at the time of the study.

Data collection instruments

In accordance with the recommendations of Ajzen (1991), we designed a questionnaire composed of several seven-point Likert-type scales ranging from 1 (completely disagree) to 7 (completely agree) to obtain the various measures in our study, namely, the variables in Ajzen's (1991) TPB model (attitude, subjective norms, perceived control, intention and behaviour) and perceptions about children. For each of these variables, we present participants with a series of items for which they must express their level of agreement on a scale of 1 to 7. For example, items measuring attitude were introduced by the following sentence: 'Here is a set of statements expressing views about FP in general. Please indicate the opinion that fits your attitude by circling the number on the scale that it is (1 = strongly agree, 7 = not at all agree)' (see examples of items below).

Independent variables

Attitude toward FP. In accordance with Ajzen (1991), attitude toward FP reflects the degree to which Nigerian women have a favourable or unfavourable evaluation of FP. It was measured using a nine-item scale. As proposed by Ajzen, we tested

the evaluative aspect with items such as ‘FP gives a woman more freedom’. The instrumental aspect was translated by items such as ‘FP lightens the family load’.

Subjective norms regarding FP. These refer to the likelihood that important referent individuals or groups approve or disapprove of performing a given behaviour (Ajzen, 1991, p. 195). They were assessed using a five-item scale asking participants to imagine the extent of approval of persons close to them regarding their FP practices. The injunctive aspect of subjective norms was represented here by items such as ‘My relatives approve of me using FP’. The descriptive aspect was translated by items such as ‘Most important people around me use FP’.

Perceived control with respect to FP. This refers to people’s beliefs about their ability to perform a particular behaviour (Ajzen, 2002, p. 667). This variable was measured by asking the interviewed women to use a seven-point scale made up of seven items, to rate the extent to which they believed they had control over their FP behaviour. The different items on this scale took into account the ease or difficulty of practicing FP, as in ‘I use FP whenever I want to’. These items also dealt with the woman’s chances of getting her spouse to accept FP, as in ‘I can convince my husband to let me use FP if I want to’, and with perceived personal efficacy, as in ‘I can control the number of children I have if I want to’.

Perceptions about children and procreation. These were assessed on seven items measuring the health-related and socio-normative aspects of procreation² (benefits or disadvantages of having offspring). Example: ‘Having many children makes others respect you’.

Dependent variables

Intention to engage in FP. This is an indication of the amount of effort one is willing to exert to perform a behaviour (Ajzen, 1991). Ajzen (1991) suggested testing the consistency of an individual’s intention by starting out with items expressing strong involvement (every day, very soon) and ending up with an item expressing weak involvement (in the months to come, as soon as possible). In our study, intention to engage in FP was captured using three items ranging from near-term intention (within the next few days) to longer-term intention (within the next few months).

Use of FP. This was measured with three items. Example: ‘I use FP because all my female friends do’.

Procedure

Data gathering was done by two methods: door-to-door for the non-literate women and in a room arranged for this purpose for the those women who were literate. The study was presented as a research project concerning FP. Owing to the somewhat taboo nature of sexuality³ in this culture, a fair amount of time (between 10 and 45 minutes depending on the women) was spent on gaining each woman’s trust regarding the confidentiality of her responses. The introduction and the instructions were the same for the two groups, and included a definition of what is meant by FP and reassurance of confidentiality. FP was defined as ‘both limiting and spacing births’ by use of modern means of contraception such as pills, condoms or

intrauterine device (excluding traditional methods; see Nomaou & Harouna, 2007). In addition, for the sake of discretion, the researchers were careful not to interview any next-door neighbours. Another precautionary measure was requested by the women themselves. When making the appointment, they asked if the interview could take place during the hours when their husbands were out. The questionnaires were answered individually by participants in the presence of the researcher. For non-literate women, we translated the questions into their native language (i.e. Hausa), and we wrote down their answers as we went. The urban women (literate) filled out the questionnaire themselves in the presence of a researcher.⁴ The questionnaire session took 30 minutes on average. We set out to have a study sample of 300 participants with an equivalent number of urban and rural women. The overall response rate was 90%, i.e. 100% of rural women ($N = 150$ participants of 150 expected) and 80% of urban women ($N = 120$ participants of 150 expected).

Results and analysis

First, we checked the consistency and reliability of the assessment scales using Cronbach's α and a principal component analysis (PCA). Then we verified our hypotheses using a mediation test.

Preliminary analyses: testing the validity of the measuring scales

The consistency of the scales was tested using a principal component analysis with Oblimin rotation (see Fabrigar, Wegener, MacCallum, & Strahan, 1999). On the whole, all the measuring scales exhibited good reliability. The *attitude scale* had a very high reliability index ($\alpha = .93$, $M = 5.31$, $SD = 1.61$). The PCA showed that attitude was a one-dimensional scale (66% of variance explained). The *subjective norms scale* also showed excellent reliability, with an α value of .74 ($M = 3.30$, $SD = 1.34$). It had one dimension pertaining to the approval of relatives (50% of the variance). The *perceived control scale* had a very satisfactory reliability index ($\alpha = .84$). Two components were evident here. The first (four items) corresponded to perceived control with respect to oneself (52% of variance); the second (three items), referred to perceived control with respect to others (20% of variance). The *intention scale* was also highly reliable ($\alpha = .78$, $M = 5.67\%$, $SD = 2.20$); it was one-dimensional (more than 70% of the variance). The *FP-use scale* had a moderate but acceptable reliability index of .62. It had only one dimension (58% of variance). Finally, the child perception scale obtained a high reliability score too ($\alpha = .75$). It had two dimensions (57% of scale's variance). The first dimension (four items) was related to the benefits of procreation (40% of variance). The second (three items) was related to the negative aspects of procreation (17% of variance). Table 1 summarises the results.

Prediction of FP practices using the TPB model

In order to test the hypotheses set out in the study, we began by checking for effects of the TPB variables on FP predictions. As a second step, we looked at the effects of perceptions about children and how they might improve the predictive power of the TPB model. We performed these analyses separately for rural and urban women owing to differences between these two populations (literate vs.

Table 1. Reliability and consistency of the measurement scales.

| Variables | <i>M</i> | <i>SD</i> | Component 1 | Component 2 |
|--|----------|-----------|-------------|-------------|
| Attitude toward FP: 9 items ($\alpha = .93$) | 5.31 | 1.61 | 66% | |
| FP is a good thing | 5.67 | 2.05 | .842 | |
| FP helps in managing one's income | 4.34 | 2.05 | .827 | |
| FP gives a woman more freedom | 4.75 | 2.10 | .768 | |
| FP makes it possible to have evenly spaced births | 5.86 | 1.75 | .882 | |
| FP lightens the family load | 4.62 | 1.93 | .789 | |
| FP lets a woman rest between pregnancies | 6.14 | 1.60 | .841 | |
| FP helps avoid unwanted pregnancies | 5.85 | 2.01 | .849 | |
| FP decreases the risk of child mortality | 3.68 | 2.10 | .705 | |
| FP makes it possible to have the number of children that one can raise properly | 5.15 | 2.01 | .817 | |
| Subjective norms: 5 items ($\alpha = .74$) | 3.30 | 1.34 | 50% | |
| Most of my female friends use FP | 4.37 | 1.91 | .599 | |
| Most important people around me use FP | 4.10 | 1.41 | .683 | |
| My husband approves of me using FP | 3.10 | 2.22 | .782 | |
| My relatives approve of me using FP | 3.11 | 2.24 | .854 | |
| Religious authorities approve of me using FP | 1.81 | 1.57 | .592 | |
| Perceived control: 7 items ($\alpha = .84$) | 5.02 | 1.78 | 52% | 20% |
| I use FP whenever I want to | 4.95 | 2.62 | .836 | .179 |
| I have to ask my husband for his opinion | 3.82 | 2.34 | .861 | .077 |
| I have to ask my relatives for their opinion | 4.73 | 2.60 | .864 | .204 |
| I can have more children if I want to | 4.06 | 2.83 | .720 | .157 |
| I can convince my husband to let me use FP if I want to | 5.11 | 2.35 | .004 | .925 |
| I'm capable of discussing FP with my husband | 4.98 | 2.23 | .239 | .829 |
| I can control the number of children I have if I want to | 6.22 | 1.38 | .507 | .583 |
| Perceptions about children and procreation: 7 items ($\alpha = .75$) | 3.26 | 0.68 | 40% | 17% |
| Bringing a child into the world is a proof of good health | 4.41 | 2.08 | .507 | -.387 |
| Bringing a child into the world is a source of self-esteem | 4.47 | 1.86 | .786 | -.069 |
| Having many children makes your husband respect you | 3.90 | 1.88 | .720 | -.384 |
| Having many children makes others respect you | 4.35 | 1.91 | .797 | -.097 |
| Having many children causes the body to age | 2.36 | 1.57 | -.172 | .789 |
| Having many children causes health problems | 3.31 | 1.87 | -.051 | .739 |
| Bringing a child into the world wears out the body | 3.17 | 1.63 | -.212 | .702 |
| Intentions: 3 items ($\alpha = .78$) | 4.46 | 2.12 | 70% | |
| I intend to use FP within the next few days | 3.65 | 2.60 | .832 | |
| I intend to use FP within the next few months | 4.07 | 2.70 | .868 | |
| I intend to use FP as soon as possible | 5.67 | 2.29 | .815 | |
| FP practices: 3 items ($\alpha = .62$) | 3.40 | 1.71 | 58% | |
| I use FP because contraceptives are free | 2.64 | 2.43 | .846 | |
| I use FP because all my female friends do | 2.34 | 1.93 | .853 | |
| I use FP because I don't want a lot of children | 5.31 | 2.45 | .551 | |

non-literate). We used a four-step mediation analysis consisting of a series of linear regressions, following the method proposed by Brauer (2000).⁵

Predicting FP among rural women

The results of the analysis showed that FP practices were predicted by a partial mediation relation (37% of the variance explained by the overall model). For rural women, subjective norms ($B = -.624, p < .0001$) were the best predictor of engagement in FP, followed by perceived control ($B = .433, p < .035$) and intention ($B = .300, p < .001$). Intention did not mediate the effect of subjective norms or perceived control, both of which had a significant direct effect on behaviour in the presence of intention ($R^2 = .376, p < .0001$). In particular, engagement in FP was strongly and negatively determined by the women's perceptions of the opinions of people in their surroundings. The more strongly these norms were perceived to be, the less inclined the women were to practice FP. It seems that the most important thing for these women was what their relatives, friends and people they look up to think about their behaviour in matters of FP.

Predicting FP among urban women

For urban women, attitude was the only determinant of FP practices ($B = .259, p < .019$). The more positive their attitude, the more inclined these women were to practice FP. Subjective norms ($B = -.094, ns$) and perceived control ($B = .138, ns$) did not have a direct effect on FP use. The variance explained was lower than for rural women (18%). Curiously, and contrary to Ajzen's predictions, intention did not have a statistically significant effect on FP practices for women living in the city and its effect disappeared in the presence of the other variables.

Effect of perceptions about children and procreation on predictions of FP practices in Niger

As above, we conducted a series of linear regressions.

Impact of perceptions about children on predictions of FP among rural women

When we took the rural women's perceptions about children into account in our predictions of FP practices, we found that intention completely mediated the effects of attitude and perceived control, which no longer had a direct effect on behaviour. FP practices were predicted by perceptions about children and procreation ($B = -.909, p < .0001$), subjective norms ($B = -.487, p < .0001$), and intention ($B = .265, p < .001$) ($R^2 = .400, p < .0001$). Note that perceptions had a greater effect on FP practices than did intention and subjective norms.

Impact of perceptions about children on predictions of FP among urban women

When we conducted the same analysis for the urban women, we found that FP practices were predicted by subjective norms ($B = -.601, p < .0001$), attitude ($B = .269, p < .01$), and perceptions about children and procreation ($B = -.248, p < .03$) ($R^2 = .209, p < .0001$). Note here that FP behaviour was negatively linked to both

subjective norms and perceptions about children. This means that the stronger or more positive these norms and perceptions were, the less the women were inclined to engage in FP. Note also that the effect of intention disappeared when all the variables were included, whereas intention was a good predictor of behaviour when its direct effect on behaviour was assessed.

Discussion of results

The results of this study confirmed the important role of perceptions about children and procreation in predicting FP practices, whether among rural or urban women. Their impact was even greater than that of intention. Child-related perceptions turned out to be the main variable for predicting FP, as they accounted for a larger part of the variance than when Ajzen's classic model was used (40% vs. 37% for rural women; 21% vs. 18% for urban women). Thus, in line with our predictions, perceptions about children and procreation played both a direct and an indirect role in predicting FP in Niger. To explain the direct role, one can refer to Sanders and Baron (1977), who spoke of the direct causal effect of cultural and social values on behaviour, although in our case, we cannot conclude that there was a causal relation. The indirect role showed up as a stronger prediction (higher variance) for perceptions about children and procreation than for the standard TPB variables like intention and perceived control. Note that the link to the predicted behaviour was negative, meaning that the more positive the women's perceptions about children and procreation were, the less inclined they were to engage in FP and thus to have fewer children. This observation attests to the important place and value granted to children by these women. These results can be compared to those of several of the above authors who found a link between fertility and the perceived importance of having children (Albert et al., 2005; Bulatao, 1979; Dyer et al., 2004; Gerrits, 1997; Runganga et al., 2001, etc.). Indeed, in the societies examined in those studies, as in the Nigerian culture, having children procures self-esteem and social recognition.

Theoretically speaking, these results show that we were indeed able to improve TPB-based predictions by adding a particular measure, here, a scale assessing perceptions about children and procreation (improvement of 2.4% for rural women and 2.8% for urban women). These results remind us of those obtained by Ajzen (1991), who found that introducing other variables such as perceived moral obligation into the TPB model considerably improved behavioural predictions (between 2% and 4%: 2% for cheating, 4% for shoplifting, 4% for lying).

Practically speaking, these results are of a crucial importance for the counsellors and different stakeholders in FP (health personnel – doctors, midwives, nurses – staff of the Ministry of Health and Reproduction). Particularly, they indicate that to increase engagement in FP in Niger, it is important to implement programmes aimed at changing women's perceptions about having children. As a whole, our findings suggest that Nigerian women minimise the importance of the economic and health-related burdens of having more than one child (illness, fatigue, raising and educating the children, etc.). This being the case, awareness programmes should include communications about the numerous costs and consequences of having many offspring (costs of childbearing and providing an education, keeping up with everyday care and tasks, risk of children joining street gangs and becoming delinquents, etc.). Such communications could also deal with the risk of health

problems resulting from too many or too closely spaced pregnancies, but also the impact on the children's health. Here, one could advantageously rely on child-related values likely to lower the desire to have a child, which according to Bulatao (1979) include direct financial costs of children, childrearing demands (more work, emotional strain, child sickness, worry over child's future, etc.), constraints imposed upon the parents at personal, social, and occupational levels (being tied down), and costs to social relationships (marital strains, overpopulation). The idea is not to deny the importance of offspring, but to show that values about having children have evolved, in such a way that today, children represent both a social benefit and a social cost. One could also add that it is better to have a few well-raised children who succeed in life than many children who become a social load and a burden to society. It would also be beneficial to attempt to reduce the pressure of social norms that weigh heavily on women, while at the same time raising their feeling of control, not only by providing extensive knowledge about contraception and emphasising its advantages, but also by explaining that engaging in FP is a woman's right. On this level, it might be profitable to bring the husbands into the picture due to the strong normative influence they have on their wives.

This last point underlines one of the limitations of our study – we worked with a female sample only. Yet the decision to use contraception is very often made by the couple. Moreover, in a culture where women generally have little power, convincing husbands of the utility of FP could not only relieve woman of the weight of subjective norms, but also allow couples to share the consequences of such a decision. It would therefore seem worthwhile to conduct a study like the present one but with a sample containing both men and women. In addition, the age difference between rural and urban women also invites clarification of the effect of age in a future study. Indeed, the desire for children may be perceived differently by women according to their age and influence the practice of FP (see Nomaou & Harouna, 2007). Another limitation of the present study was that our sample contained women who differed as to their place of residence and their amount of schooling. According to Nomaou and Harouna (2007), level of education appears to be the most significant factor in contraceptive use. Furthermore, we did not take into account the number of children the women already had. However, a study by Nomaou and Harouna (2007) showed that if the use of contraception according to the number of living children remains extremely low among women who had no living child, it does not show substantial variations from a child. It would be useful, then, to control these variables in a future study in order to examine the effects of gender, age, education and number of children on perceptions about children and FP practices. Lastly, the scale used to assess perceptions could be improved by including some other dimensions, notably the economic dimension, which was not sufficiently captured in the present study.

Notes

1. The Akan, who live in southern Ghana and in the eastern and south-central parts of the Ivory Coast, are composed of several ethnic groups (Ashanti, Brong, Fanti, Nsima, Baoule, Agni, Attié, etc.).
2. Note that this scale originally had 13 items, but the items related to financial or spiritual considerations turned out to be relatively inconsistent with the overall scale, so they were discarded.

3. The taboo nature of sexuality means that sexuality in Nigerian culture is an issue it would be unseemly to mention by virtue of social or moral conventions, especially in the presence of an unfamiliar person.
4. To avoid the mode of data collection affecting our results, we controlled it by processing the data according to the method of collection. In addition, with the mode of responses being standardised at the level of scales (circle an answer), bias could be minus.
5. The four steps in this method consist of checking for (1) the effects of attitude, social norms, and perceived control on intention, (2) their direct effects on behaviour, (3) the effect of intention on behaviour, and (4) the effect of these variables taken together, with intention as the mediator.

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