

# Social norms in promoting family planning: a study in Niger

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## Abstract

Despite the progress made in the domain of family planning, the practice of the latter remains a current issue around the world, particularly in emerging and developing countries. This study examines the impact of traditional values and norms regarding family planning in Niger. Self-reported data were gathered – by means of a questionnaire – as to the variables likely to influence family planning practices (through contraceptive use). Participants were married females ( $N=200$ ), between 21 and 50 years of age. The data were analysed using SPSS 15.0 software. The findings suggest that subjective norms have a direct effect on contraceptive use among women with no formal schooling, living in either rural or urban settings. For women with some formal schooling, it was their attitude towards family planning that had a direct effect on family planning practices. Suggestions for devising targeted family planning messages based on cultural values and norms have been proposed.

## Keywords

Contraception, cultural values, family planning, health-related behaviour, social norms, theory of planned behaviour

The world population is increasing greatly every year, although the rate of progress varies considerably across different parts of the world. Some countries (such as Japan, Russia, and Germany) have increasingly aged populations and are experiencing a decline in population growth (cf., Index Mundi, 2012; Kinsella & Phillips, 2005), while others with younger populations are expanding rapidly (most African countries, including Niger, Zimbabwe, and Uganda) (Index Mundi, 2012). Each situation brings with it certain social, economic, environmental, and political challenges. According to the Nigerien Ministry of Population and the United Nations Population Fund

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(UNFPA) (World Bank, 2012), there are substantial differences in reproductive rates internationally varying from about 1.2 children per woman in industrialised countries such as Japan, Poland, and Germany to more than 7 in developing countries such as Niger. The adoption of family planning programme (FPP) could help keep population control within sustainable levels. Family planning (FP) consists of making procreation a conscious and voluntary process through the use of appropriate contraceptive methods. It is practised either by severely regulating the number of births per woman (as in China) or simply by advocating less frequent births (as in Niger). In this article, we will use the term 'contraception' when referring to the practice itself and the term 'family planning' when referring to the policies and the system put in place by the authorities.

The motivations for FPP include economic, social, precautionary (in terms of health measures for mothers and their babies), and others (Stokes, Brown, McGrath, & 1977). In Niger, FPP is related more to economics and health than to issues of demographics as evidenced by the mean density of the population of nine inhabitants per square kilometre. FP officially entered the Nigerien political agenda in 1975, following a period of severe drought that devastated the country. Nowadays, after 37 years of pro-FP policies, the number of births per woman is 7.5, one of the highest in the world. In Niger, modern contraceptives are used very little (with an overall average of 18%, 14% in large cities and 4% in rural areas) according to the United Nations Children's Fund (UNICEF; 2008) despite their universal availability and variety.

It is important to note that FPP, as a method of limiting the size of families, is a practice, the choice and success of which depend above all on the values, beliefs, and norms inherent in each society. For instance, in Niger, having many offspring is something that is socially validating and validated, the belief that every child is a blessing being well established (Nomaou & Harouna, 2007; Nsamenang, 1992; Policy Project, 2005; Potts, Gidi, Campbell, & Zureick, 2011). Large families are admired, even coveted. Not having children is treated with disparagement, and intentionally deciding not to have children is tolerated even less. For example, previous research has demonstrated that the more positive a woman's perception of children and procreation is, the less inclined she is to adopt FPP (Mayaki & Kouabenan, 2014). Engaging in FPP is thus a difficult choice for individuals, due not only to the representations and beliefs surrounding this practice but also to subjective pressure and social norms, which tend to place more value on procreation. In particular, we believe that in order to promote FP, FPP counsellors should target their messages of propaganda in such a way that they take into account not only the values conveyed through the cultural context, including the attitudes and beliefs of the target population, but also the social pressure exerted on those attitudes and beliefs.

This study is part of a comprehensive project aimed at isolating the factors that promote or hinder the practice of FP in Niger (Mayaki, 2008).

## Theoretical underpinnings and study aims

This study identifies the beliefs and attitudes held by Nigeriens towards family planning practices and refers to the Theory of Planned Behaviour (TPB; Ajzen, 1985) that elucidates several types of beliefs, including behavioural beliefs, normative beliefs, and control beliefs. *Behavioural beliefs* refer to an individual's attitude towards a given behaviour. *Normative beliefs* (subjective norms) represent people's perception of the pressure exerted by others in their environment, especially by significant others whose beliefs one cares about, that is, what each person holds to be the expectations of his or her reference group. *Control beliefs* represent the perceived ability (ease or difficulty) that an individual has to put in place, execute, or master behaviour (perceived control). The TPB postulates that the main determinant of behaviour is the intention to act, which in turn is determined by attitudes, subjective norms, and perceived control.

Research has demonstrated that attitudes, subjective norms, and perceived control are usually good predictors of intention (Ajzen, 1985, 1991). However, there are many discrepancies as to the predictive power and role of each variable (Albarracin, Johnson, Fishbein, & Muellerleile, 2001). For example, Davis, Ajzen, Saunders, and Williams (2002) showed that subjective norms had a strong negative effect on African Americans' decisions to continue their studies. In a study on birth control, Jaccard, Helbieg, Wan, Gutman, and Kritz-Silverstein (1995) observed that knowing how to use a diaphragm proved insufficient for it to be put into use. Rather, it was motivational factors based on attitude, the perceived chance of becoming pregnant, and normative factors that seemed to be decisive. In another study, Pagel and Davidson (1984) arrived at the conclusion that attitude is a good predictor of the choice of a contraceptive method. Finally, findings by O'Connor, Fergusson, and O'Connor (2005) showed that attitude had a direct effect on male contraceptive use when the need for stress reduction was taken into account.

This study has both theoretical and practical objectives: TPB is tested in a cultural context where it had not yet been applied, and the research can inform the promotion of effective contraceptive practices, with a view to setting up better FPP. In particular, the aim of the study was to find out whether the factors that are critical to FPP success in a Western context are also determinant in an African context, and more specifically in Niger. The specific research questions investigated the influence of social norms, attitude and perceived control on the *use of contraception by Nigerien women*. We expected to find that a positive attitude towards contraception, normative beliefs favouring contraception, and a strong feeling of control would increase the intention to practise contraception, which in turn would determine contraceptive use.

## Method

### Participants

The participants were a convenience sample of 200 women of childbearing age, 100 from a rural area and 100 from an urban area, but in both cases 50% had had schooling and 50% had not.<sup>1</sup> The sample therefore consisted of an equal number of urban and rural women and an equivalent number of women with and without schooling. Participants with schooling were randomly selected after answering an advertisement. To recruit participants with no schooling, door-to-door interviews were conducted with the women in their homes. All were married and participated on a voluntary basis. The rural women were between 21 and 46 years of age, with a mean age of 30.26 years (standard deviation [*SD*]=5.47 years); the urban women were between 22 and 50 years of age, with a mean age of 31.27 years (*SD*=5.57 years). All participants had access to a health centre and to the same benefits, including free birth control pills and free condoms. Other contraceptives (injections, intrauterine devices [IUDs], and contraceptive implants) were not free but were largely subsidised. Women were selected for this study because they seemed, *a priori*, to be the persons most concerned with contraception.

### Instruments

In order to identify the key variables for the study, a questionnaire was devised based on the one recommended by Ajzen (1991, 2002) and adapted to the issues being addressed and to the particular cultural context. The five dimensions of the TPB model (attitude towards contraception, subjective norms, perceived control, use of contraception, and intention to use contraception) were assessed using a series of statements for which the participants were asked to rate their level of agreement on a seven-point Likert-type scale ranging from 1 (*completely disagree*) to 7 (*completely agree*).

*Attitude towards contraception* (e.g., 'FP lets the mother's body rest') was assessed using six items exhibiting a very high reliability index ( $\alpha = .93$ ). A principal component analysis revealed a single component (65.68% of the scale's variance).

*Subjective norms* (e.g., 'My friends approve of me practising FP') were measured by a six-item scale with a very satisfactory reliability ( $\alpha = .75$ ). Two components emerged here. The first (four items) was related to approval by the woman's relatives, friends, and spouse (45.26% of the variance). The second (two items) accounted for 18.38% of the scale's variance and expressed the approval of religious and traditional leaders.

*Perceived control* was evaluated using a scale consisting of six items ( $\alpha = .84$ ). This scale had two components. The first component consisting of three items was related to control with respect to others (56.47% of the variance), for example, 'I'm afraid to talk about contraception with my friends and family'. The second component (consisting of three items) referred to control with respect to oneself ('I can stop taking medication whenever I want to' (19.08% of the variance).

*Use of contraception*, a predicted variable, was measured on a six-item scale exhibiting good reliability ( $\alpha = .76$ ). Two components emerged from this scale. The first component (three items) was related to the easy/complicated aspect of the use of contraception (47.18% of the variance), for example, 'Using a contraceptive is easy for me'. The second component (three items) was related to the benefits of the practice, as in 'Using contraception helps me avoid unwanted pregnancies' (22.47% of the variance).

*Intention to use contraception* was measured by three items, for example, 'I intend to use contraception within the next few days'. The scale showed very high reliability ( $\alpha = .95$ ) and was one-dimensional (91.58% of the variance). See Table 1 for descriptive statistics and the measurement reliability analysis.

**Table 1.** Descriptive statistics and reliability analysis of the measures.

Scales	N	Items	Minimum	Maximum	Median	Mean	SD	Variance	Alpha
Attitude	200	6	1	7	5.41	4.94	1.66	2.77	.93
Subjective norm	200	6	1	4.67	1.50	1.67	0.75	0.56	.75
Perceived control	200	6	1.50	7	3.50	3.92	1.54	2.38	.84
Intention	200	3	1	7	1	3.03	2.67	7.16	.95
FP practice	200	6	1.67	7	4	4.23	1.26	1.60	.76

SD: standard deviation; FP: family planning.

## Procedure

All participants volunteered and agreed individually to participate in the study without compensation. The instructions were the same for all participants, and all participants were given the instructions orally. Data gathering was completed using two methods: door-to-door for the women with no schooling, and in a room arranged for this purpose for those participants with schooling. Participants with no schooling received help with the reading and selection of responses. For these women, the questions were translated into their native language (i.e., in Hausa<sup>2</sup>). The answers were recorded and responses were checked with participants to confirm that what was noted fitted well with what they had said. The questionnaire session took an average of 30 min. Participants answered the questionnaire individually during a face-to-face interview.

## Ethical considerations

Ethical approval for the research was obtained from the Rectorate of the University of Niamey (Niger). All participants were informed of the nature and the goal of the study a few days before the appointment for the interview. As participation was on a voluntary basis, the participants could withdraw from the study at any time. They were also informed of the confidentiality and anonymity of their responses in the safekeeping of the research data and the reporting of the findings.

## Data analysis procedure

The data were analysed using SPSS 15.0 software. Data for women with and without schooling were analysed separately, while taking into account the living environment (urban vs rural). The reliability of the measuring scales was checked using Cronbach's alpha (1946), and homogeneity was assessed via a principal component analysis. Measures of association between the various variables of the TPB model were computed using Bravais–Pearson's  $r$  coefficient. Overall, very strong, significant, and positive correlations were found between all variables (correlations vary between .35 and .94).

To test the relative importance of each of the study variables on contraceptive use, a four-step mediation analysis was conducted following the procedure recommended by Brauer (2000). The first step tested the effects of attitude, subjective norms, and perceived control, on intention to act; the second verified the direct effect of these same variables on the studied behaviour. The third step looked at the effect of intention on this behaviour, while the final step consisted of examining whether the effects of the different components (attitudes, subjective norms, and perceived control) on the behaviour disappeared when intention was introduced into the regression equation. To simplify the presentation of the results, only the final model of the mediation test for each of the four subject groups defined above is presented.

## Results

### *Determinants of contraceptive practices in an urban setting*

The mediation analysis on the urban participants, according to whether they had or had not attended school, gave rise to the following results.

*For the urban women with no schooling*, contraceptive use was predicted by intention ( $B = .211$ ,  $p < .002$ ), subjective norms ( $B = -.873$ ,  $p < .006$ ), and perceived control ( $B = .480$ ,  $p < .02$ ) ( $R^2 = .56$ ,  $p < .0001$ ). The results showed that the practice of contraception was positively influenced by intention and perceived control, but negatively impacted by subjective norms. In this case, the stronger the participants' intention and the higher their perceived control were, the more they used contraception. On the contrary, the more they submitted to the weight of subjective norms, the less inclined they were to practise contraception. Thus, contrary to the original TPB prediction (Ajzen, 1985), intention only partially mediated the effect of the other variables. Intention mediated the effect of attitude, but not that of perceived control or subjective norms, which still had a significant direct effect on contraceptive practices.

*For the urban women with schooling*, there was partial mediation of contraceptive practices by intention but, unlike the women without schooling, the effect of subjective norms  $t$  was fully mediated by intention ( $R^2 = .74$ ,  $p < .01$ ). In other words, subjective norms had no effect on the practice of contraception. In this case, the contraceptive practices of urban women with schooling were determined not only by their intentions ( $B = .208$ ;  $p < .0001$ ) but also by their attitudes ( $B = .240$ ,

**Table 2.** Prediction of family planning practice in urban areas according to schooling (final model).

Schooling	R <sup>2</sup>		Unstandardised coefficients		Standardised coefficients	t	Significance
			B	SE	Beta		
Without schooling	.560	(Constant)	2.778	.358		7.762	.000
		Intention	.211	.063	.485	3.344	.002
		Attitude	.089	.068	.151	1.314	.195
		Subjective norm	-.873	.303	-.415	-2.883	.006
		Perceived control	.480	.199	.483	2.415	.020
With Schooling	.739	(Constant)	1.133	.439		2.583	.013
		Intention	.208	.052	.400	3.988	.000
		Attitude	.240	.088	.269	2.730	.009
		Subjective norm	.208	.140	.152	1.487	.144
		Perceived control	.215	.102	.231	2.117	.040

SE: standard error; FP: family planning.  
 Dependent variable: FP practice.

$p < .009$ ) and perceived control ( $B = .215$ ,  $p < .04$ ). This means that attitude and perceived control had a significant direct effect on contraceptive practices for those participants who had attended school. It is important to note that the amount of variance explained by the model was greater here than for the urban women who had not attended school (Table 2).

### Determinants of contraceptive practices in a rural setting

For the women with no schooling in a rural setting, contraceptive practices were predicted by intention ( $B = .229$ ,  $p < .001$ ) and subjective norms ( $B = -.658$ ,  $p < .05$ ) ( $R^2 = .52$ ,  $p < .0001$ ). The effects of perceived control and attitude were completely mediated by intention, whereas

**Table 3.** Prediction of the family planning practice in rural areas according to schooling (final model).

Schooling	Model	R <sup>2</sup>	Unstandardised coefficients		Standardised coefficients	t	Significance	
			B	SE	Beta			
Without schooling	4	.525	(Constant)	2.696	.429		6.288	.000
			Intention	.229	.061	.526	3.729	.001
			Attitude	.094	.072	.156	1.299	.201
			Subjective Norms	-.658	.352	-.260	-1.869	.068
			Perceived Control	.365	.206	.330	1.777	.082
With Schooling	4	.845	(Constant)	1.120	.801		1.398	.169
			Intention	.332	.084	.688	3.975	.000
			Attitude	.229	.083	.183	2.773	.008
			Subjective Norms	.048	.192	.016	.252	.802
			Perceived Control	.144	.171	.141	.841	.405

SE: standard error; FP: family planning.  
 Dependent variable: FP practice.

subjective norms had a significant direct effect on the use of contraception. Here, subjective norms negatively influenced contraceptive practices: the stronger the norms, the less likely the non-schooled rural women were to practise contraception.

Among the *women with schooling* living in a rural setting, the use of contraception was mainly predicted by intention ( $B = .332, p < .0001$ ) and attitude ( $B = .229, p < .008$ ) ( $R^2 = .845, p < .0001$ ). Neither perceived control (as observed in the TPB model) nor subjective norms – which played a determining role for the non-schooled women – had a significant direct effect on contraceptive practice in this population (Table 3).

## Discussion

The results of this study showed, in line with the TPB, that behavioural intention was a determinant of contraceptive practices, and it was the major determining factor of the use of contraception. However, behavioural intention did not completely mediate the effects of the other model variables, namely, attitude, perceived control, and subjective norms. Depending on the type of population considered, variables other than intention also had a direct impact on contraceptive practices. While it is acknowledged following the TPB model that perceived control can have a direct effect on behaviour in the presence of the intention to act, this does not hold true for attitudes and subjective norms. In fact, the results showed that, depending on the participant group, subjective norms and attitudes did have direct effects on contraceptive practices in addition to intention.

These findings may be explained by the fact that the role of attitude, subjective norms, and perceived control in predicting intention and behaviour can vary according to what behaviour is at stake and what population is being examined (Ajzen, 2005; Ajzen & Fishbein, 2005). Beliefs (normative, perceived control) and attitudes may vary across settings, even if they have a stable core; they are strongly affected by contextual events and facts (Ajzen, 2005; Ajzen & Fishbein, 2005). The study was situated within the context of a collectivist cultural context in which social pressure, opinions, and support from others appear to be very important. In this respect, the results concur with the conclusion of Armitage and Conner (2001) that when normative influences are very strong, perceived control is generally weak, and the weaker it is, the more subjective norms determine behaviour. As in the Ross and McLaws (1992) study, subjective norms acted directly upon behaviour, more specifically among the non-schooled women but not among those with schooling. In other words, for women who have access to it, formal schooling may allow them to acquire greater control over the decisions they make, and this may lessen some of the weight of norms and social pressure. We can also assume that schooling can provide greater knowledge of the advantages of contraception and the arguments supporting their decision. The opposite was found for the women who had not attended school, whether they lived in the city or in a village. These women seem to remain sensitive and attentive to norms and social pressures, which thereby influence their behavioural decisions.

Perceived control had no direct effect on contraceptive use for the rural women, whereas it did for the urban women, whether or not they had attended school. Perceived control is stronger in individualistic-type cultures (e.g., Western societies) than in collectivist-type cultures (such as Asian or African societies) (Lee & Green, 1991). In the urban areas of Niger today, the lifestyle is becoming increasingly westernised. City-dwelling couples live more and more in nuclear family groups, far from parents and relatives, and are potentially more independent. Furthermore, they are subject to a diversity of cultural influences, notably Western influences arising from living among resident groups of varying origins. However, the fact that subjective norms still seem to carry substantial weight, particularly for women without schooling living in the city, would tend to indicate

that schooling takes precedence over area of residence. In Niger, women who do not go to school are generally completely dependent on their husband or parents for their subsistence and are very sensitive to the judgments and opinions of significant others (cf., Lee & Green, 1991; Trafimow & Finlay, 1996). Among the women who had attended school, whether they lived in an urban or rural setting, attitudes had a direct effect on contraceptive practices. The results are in line with those of Trafimow (2001) which showed that 'participants' perceptions of normative pressure strongly predicted intentions to use condoms only under conditions of extreme normative confidence. Otherwise, their attitudes were better predictors of their intentions to use condoms' (p. 49). Here, we can suppose that women without schooling were more subject to normative pressure than women with schooling. Furthermore, Ajzen (2005) contended that the type of information on which an attitude is based is capable of influencing its predictive value. In their study, Shahanjarini, Rashidian, Majdzadeh, Nasrin Omidvar, and Shojaeezadeh (2010) showed that attitude plays a predominant role in the consumption of unhealthy foods among young adults. On another point, Bentler and Speckart (1979) and Manstead, Proffit, and Smart (1983), cited by Giger (2008), showed that attitude can influence behaviour directly and can predict it in a more detailed way than intention. Furthermore, Bagozzi and Yi (1989) concluded that intention mediates the effect of attitude on behaviour only when the person has a well-defined intention to act. It is true that most of the participants in our study – given the cultural context that validates procreation and the taboo nature of the behaviour studied (contraception) – did not have a well-defined intention.

One limitation of this study is that it focuses on an all-female population. Indeed, even if women are at the heart of the practice of FP, initiating a strong and sustainable practice requires the collaboration of the couple, that is, the husband and wife. However, it is worth mentioning that, for the time being, FPP in Niger mainly target women, who are seen at Niger's 'Integrated Health Centres' (centres that deliver advice on FP). It therefore seems critical to understand women's views on FP because, not only are women at the heart of procreation, but they are also affected by health problems associated with multiple pregnancies in quick succession. The fact that FP-intervention studies with both men and women are needed is nevertheless acknowledged in order to achieve greater effectiveness in promoting FP.

Another limitation of the study lies in the use of a convenience sample and therefore a non-representative sample. This makes it difficult to generalise the results and could weaken the ecological validity of results. Moreover, the use of small samples could also increase the chances that significant differences are deceptively positive or that important differences will be missed. Finally another limitation relates to the fact that the number of offspring of participants was not taken into account. Research shows, however, that the number of previous children does not have a real influence on the practice of contraception (see Nomaou & Harouna, 2007). Further research with a larger and more representative sample of both men and women is necessary to clarify the role of variables such as gender, age, number of children, and other factors. Despite these limitations, the results of this study appear to have clear theoretical significance and practical importance for conducting campaigns to promote FP in Niger.

## Conclusion

On a theoretical level, this study shows that Ajzen's (1985) model can greatly inform problems like the practice of FP. In particular, the results showed that the influence of the variables in the model on behaviour may depend on the cultural context. In this case, whereas subjective norms were shown by Ajzen (1985, 1991) to be a weak determinant of behaviour, this study suggests that in the Nigerien context, subjective norms have a direct influence on the prediction of the practice of FP for a female sample. The same is true of attitude, which in some cases has a direct influence on FP practice.

On a practical level, the results suggest that FP campaigns promoting the use of contraceptives should target carefully the context and the type of health issue (diagnosis, prevention, etc.) (Albarracin et al., 2003; Kouabenan, Cadet, Hermand, & Muñoz Sastre, 2006; Rothman & Salovey, 1997). For instance, it is possible that with non-schooled individuals, the stronger the subjective norms are, the less likely they are to practise contraception, whereas for those with schooling, the more favourable their attitude towards contraception is, the more likely they are to actually practise contraception. Thus, some messages could be geared specifically to non-schooled women, including rural women, not only to help free these women from the weight of subjective norms but also to remove any guilt about practising contraception or FP. At the same time, these messages, by supplying detailed information about the benefits of FP methods and the potential dangers of not using them, should raise their self-confidence and sense of control.

Likewise, counsellors could be encouraged to address specific messages to women with schooling in order to influence their attitudes towards contraception or FP. Such messages might, for example, highlight the health risks associated with frequent pregnancies (including, malnutrition, childhood growth problems, and early child deaths). FP messages could also combat the 'positive' image of the large family by showing that values and priorities have evolved, especially the perception that children are a source of wealth and manual labour. Children have the right to attend school, and this can prove to be quite expensive for a large family. Finally, one could solicit support from women's groups, which offer an open forum for free discussions among women on the topic of contraception.

### Declaration of conflicting interests

The authors declare that they do not have any conflict of interest.

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### Notes

1. Schooling was assessed simply by asking participants if they had been to school or not. Participants who had never been to school were assigned to the 'no-schooling' group and ones who had were assigned to the 'with schooling' group.
2. The first author of the study is from the Hausa ethnic group and therefore speaks the Hausa language perfectly.

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