

Gender Roles, Social Thinking and Normative Aspects: A Pilot Study among Gabonese Women Drivers

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ABSTRACT

In recent years, the emancipation of Gabonese women has gained momentum. Thanks to the launch of the African Women's Decade in 2010, Gabon is implementing initiatives to empower Gabonese women. Access to driving is one of these initiatives. In the field of social thinking, the study of normative models highlights the ability of respondents to substitute for others and the influence of reference models. The objectives of this pilot study are to see how the models evolve and if it is possible to identify this autonomy in social thinking. A test of alternative choices based on eight pairs of stereotyped normative propositions (the inegalitarian vs. egalitarian model or valuing women) was submitted to a group of 41 Gabonese female drivers. The results show that these women make, on average, egalitarian choices, while they attribute more inegalitarian choices to their parents and male drivers. Regression analysis shows that parental and male drivers' variables do not contribute to the model. The results are discussed in the context of existing research.

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1. INTRODUCTION

Gabon is a country in Central Africa with a population of two million one hundred and nineteen thousand inhabitants (21 19000 hpts). [Oyane Nzue \(2013\)](#) wrote: "The problems of access to education, health, employment, housing, water, electricity, and social and economic infrastructure are the same in Gabon as in other African countries. This is why humanitarian organizations also have their place here" (p.1, own translation). The Gabonese patriarchal society, like most pre-industrial societies, describes the woman as the daughter, sister, or wife of the male individual with whom she is associated. [Coquery-Vidrovitch \(1997\)](#) wrote: "This is also why women, generally overexploited within their own clan, for a long time did not have the right to go and earn a living outside, including as servants, which they were nevertheless at home." (p. 9, own translation).

However, this subordinate role has evolved over time, becoming at first discreetly complementary: "If the role is prominent, it is hidden: it is behind the scenes that the woman is consulted by the man" ([Deniel, 1985](#), p. 10, own translation).

In recent years, the emancipation of Gabonese women has gained momentum. Thanks to the launch of the African Women's Decade in 2010, Gabon is setting up thematic groups related to the empowerment of Gabonese women. African women constitute a separate group endowed with specific and complementary attributes; they can have relatively autonomous relations with men and not simple relations of submission ([Badinter, 1986](#), p. 62).

Access to car driving is one of the levers in the emancipation of African women because it is able to act favorably on the reduction of stereotypes.



2. THEORETICAL FRAMEWORK

2.1. *Social Representations and Normative Models*

The concept of social representation [SR] designates a form of specific knowledge, practical knowledge resulting from communication networks. It first appeared in a study of Moscovici. This concept is defined as: "... a modality of particular knowledge whose function is the elaboration of behavior and communication between individuals" (own translation) (Moscovici, 1976, p. 26). Different theoretical frameworks have been developed, such as the sociogenetic or anthropological approach, the structural approach, or the sociodynamic approach. This concept has given rise to numerous theoretical and methodological reflections (e.g., Bauer & Gaskell, 1999; Farr, 1987; Gaynard, 2014, 2021; Jahoda, 1988; Moscovici, 1981, 1988, 1989; Sammut *et al.*, 2015). Studying an object of representation also reflects on the social practices linked to this object. From these practices, identified as belonging to several levels, it is possible to understand the differences observed between the groups (e.g., Gaynard *et al.*, 2011; Sarrica & Contarello, 2004; Wachelke & Contarello, 2010).

Flament initiated the focus on normative aspects within the structural approach from a theoretical and methodological point of view. In 1999, he published a reference article: "Social Representation as a normative system" (own translation). He shows that SR integrates different reference models, which has an impact on the participants' answers. The study of normative models in the field of SR attests to the ability of respondents to replace others by producing representations other than their own (Campbell *et al.*, 1996).

Flament (1999) asks students to fill out a questionnaire on the SR of higher studies for themselves (standard condition) and then "as a student well seen of vs. badly seen of by different reference groups (parents, teachers, and students)." These instructions, later dubbed "substitution instructions," are a variation of those used in the norm of internality Theory (Jellison & Green, 1981). In these results, Flament (1999) shows the influence of the models "well seen by teachers" and "well seen by parents" on the subjects' replies to the standard questionnaire. A correlation can be observed between the average profiles of the standard responses of the students and the average profiles of the responses obtained with the substitution ("well seen by teachers and well seen by parents"). Flament concludes that "the answers usually obtained in studies of social representations are largely (if not totally) the complex reflection of various normative models relevant to the object of representation" (Flament, 1999, p. 50, own translation). Starting from a similar approach, Gaynard (2003) studied the problem of biculturalism among young women of Maghrebian origin. The author used a test of alternative choices composed of pairs of normative-type, stereotyped propositions. The participants had to choose between a behavior norm characteristic of traditional culture (A) and a behavior norm characteristic of Western culture (B). In addition to the standard condition, they were asked to reply, "as a female Maghrebian student well seen by her parents vs. who is badly seen" and as a female student of another origin (Western model). The results show that the "well seen by the parents" model predicts well the replies in the standard condition; multiple regression analysis checked the weight of this model. This confirms the intercultural negotiation situation of female Maghrebian students (Gaynard, 2003). Gaynard and Andrés (2009) analyzed different reference models among a group of high school students. Starting from a questionnaire on social skills constructed as part of an intervention and resolution program for school conflicts, the authors showed the pregnancy of parental and teacher models ("well seen by . . .").

Gaynard and Bessin (2017) proposed the test of alternative choices adapted to driving teenagers on mopeds. In this study, thirteen pairs of stereotyped normative propositions were elaborated. Proposition "A" corresponded to risk-taking and transgressions, while proposition "B" corresponded to the respect of the rules. In each pair, a behavioral norm is characteristic of model A (risk-taking model and young people's lifestyle), whereas the other proposition is closer to safe behavior (model B). The participants must use proposition A or B for each theme and must choose attributions for their parents and their friends. The hypothesis that teenage boys are more prone to risk-taking and would be more influenced by the peer model is confirmed.

2.2. *Gabonese Women, Empowerment, and Driving*

The traditional Gabonese woman is described as submissive, obedient, tolerant, hardworking, a provider (thanks to agriculture, fishing, and gathering), and responsible for the education of children towards whom she shows maternal altruism (Provost, 2006). According to the ONU report in 2012, empowerment is defined as the ability to act, including access/control over resources, decision-making, freedom to dispose of oneself without risk of violence, opportunity to be heard, and influencing collective decision-making processes.

Indeed, this empowerment of women then implies an expansion of rights, resources, decision-making power, and the ability to act independently in the social, economic, and political spheres. The current

situation in the world of the labor market gives an almost identical image for all the countries of the world, a feminine connotation to jobs in the tertiary sector where integration is more difficult and salaries lower and a concentration of men in the technical and industrial sectors, where the possibilities of integration and income are much more favorable (Stefanovic & Mosconi, 2007, p. 54).

The empowerment of Gabonese women is developing on several levels: human and social development, economic development, and political participation. More and more women are driving in large cities, especially in Libreville and Port-Gentil, as a sign of emancipation and prosperity. There is a good illustration of the development in access to driving for women in Gabon with the “Com’elles”¹ program (Dionzou & Gaymard, 2023).

In Gabon, the profession of heavy goods vehicle driver is opening up to women. On the initiative of the Government, training in driving these trucks is offered to young unemployed women, which will help to break down prejudices. The “Com’elles” group is a women’s group managed by the Minister for the Promotion of Women, Ms. Prisca Koho. It was created at the end of the launch of the exclusive training for women in the professions of driving heavy machinery and truck drivers, an initiative of the GSEZ group and the Gabonese government. In order to encourage women to give the best of themselves during training, 50 truck driving licenses have been made available to them.

Thus, traditional Gabonese society puts in place levers to promote the empowerment of women. Gaymard (2003), in his study of young Franco-Maghrebi women, had shown with the test of alternative choices that they were more Western and that they attributed more traditional choices to their parents; this assumption was based on a generational conflict.

Four hypotheses will be formulated in this pilot study:

1. H_1 : Female drivers’ choices will be closer to the egalitarian model (Answers B)
2. H_2 : Female drivers will attribute more choices related to the inegalitarian model to their parents (Answers A)
3. H_3 : The choices attributed to male drivers will be the most inegalitarian
4. H_4 : The “parental” variable will have more weight than that of male drivers.

3. METHOD

3.1. Test of Alternative Choices Tool

Using themes brought up by the female drivers during the preliminary phase, we elaborated this test on eight pairs of stereotyped normative propositions. This standardized tool is inspired by the works of Malewska-Peyre *et al.* (1982) and Gaymard (2003), who have used it from the perspective of intercultural comparison. In each pair, a behavioral norm is characteristic of model A, which we have defined as being closer to a traditional view or inegalitarian model, whereas the other proposition is closer to a modern view or egalitarian (model B). The participants must choose proposition A or B for each theme and must choose attributions for their parents and for male drivers (substitution conditions). Each woman thus chooses A or B for herself, for her parents, and for male drivers.

The instructions are as follows: “In the table below, choose one of the two statements (A or B). Check the box of your choice. You must reply three times: the first time giving your opinion, the second time answering as your parents would do, and the third time as male drivers would do.”

The eight themes are the following: Inequality or equality of driving according to gender (1), the feeling of safety according to gender (2), inequality or equality in the driving of heavy machinery (3), the inability or physical ability to drive (4), inequality or equality in all socio-economic backgrounds (5), inequality or equality according to morphology (6), inequality or equality in having one’s vehicle (7), inequality or equal access to all trades (8). The subjects were also asked questions relating to age, type of license obtained, and frequency of driving.

3.2. Population and Procurement

The population consists of 41 Gabonese female drivers. The average age is 31.92 years (SD = 8.93). These female drivers hold a B license; 3 also have a truck license. The sample includes 7 students (17.07%), 24 employees (58.53%), and 10 unemployed women (24.40%). 13 said they drove very regularly (31.71%), 14 regularly (34.15%), 11 occasionally (26.83%), and 3 rarely (7.31%).

A stay in Gabon had previously allowed exchanging with some female drivers. The questionnaire was administered online via the social networks (WhatsApp, Facebook, Messenger, and Telegram). Participants were informed about the framework of the research. They were informed of the anonymity

¹ This French acronym brings together the initials in connection with the driving, the operator, the machine, and the exclusively female character of this training.

TABLE I: SUMMARY DESCRIPTIVE STATISTICS

Variable	Min.	Max.	Mean	SD
Myself	1.854	1.976	1.918	0.039
Parents	1.341	1.634	1.503	0.092
Male drivers	1.219	1.609	1.405	0.150

TABLE II: AVERAGE PROFILES FOR THE 3 CONDITIONS
(1 = INEGALITARIAN, 2 = EGALITARIAN)

Themes	Myself	Parents	Male drivers
1	1.951	1.463	1.244
2	1.878	1.341	1.219
3	1.902	1.463	1.268
4	1.927	1.634	1.366
5	1.927	1.536	1.609
6	1.854	1.488	1.536
7	1.976	1.609	1.512
8	1.927	1.488	1.487

of the responses and that they were free to stop the questionnaire at any time. They also had the option of contacting the researcher for additional information.

3.3. Analysis Strategies

The methodology characteristic of this analysis is the Q-plane methodology used in the field of normative models in SR (Flament, 1999; Gaynard, 2003, 2016). It places the themes at the head of the rows and the respondents at the head of the columns. This approach is descriptive (Reuchlin, 1976, 1991). Moreover, in place of the individual profiles at the head of the columns, we have the average profiles (Lebart *et al.*, 1997; Rouanet & Le Roux, 1993). In our study, the averages close to 1 correspond to the “inegalitarian” side, and the averages close to 2 correspond to the egalitarian side.

For the multiple regression analysis, the answers of “myself” constitute the dependent variable. As predictors or independent variables, we took the substitution replies (answer for your parents and answer for male drivers).

4. RESULTS

4.1. Descriptive Statistics

The results show that Gabonese women drivers are close to the egalitarian model (Table I, overall mean = 1.918), that they attribute more traditional choices to their parents with an overall mean that is between the traditional side (or inegalitarian) and egalitarian (1.503). They attribute the most inegalitarian choices to male drivers (overall mean = 1.405).

The comparison of the average profiles on each theme (Table II) shows that there is no agreement on the most or least egalitarian themes, except for theme 2 (feeling safe according to the gender of the driver). For this theme, female drivers attribute more inegalitarian choices to their parents and male drivers (Answer A: Having a male driver is more reassuring than having a female driver). Theme 7 is the most egalitarian for female drivers (Answer B: Each household must have two cars in their possession to facilitate the distribution of tasks). Theme 4 is the most egalitarian for parents (Answer B: The woman behind the wheel is not a dreamer; she knows how to avoid disasters and drives more carefully than the man while respecting the road users). Theme 5 is the most egalitarian for male drivers (Answer B: The level of education or diploma should not be a means of acquiring a license for Gabonese women).

4.2. Multiple Regression

The information on the regression model shows that the data does not fit the model correctly ($R = 0.613$). The proportion of the variability of the dependent variable explained by the model is 38% (R -squared). The independent variables are not significant; however, we note that the weight of the parents variable is higher (Tables III and IV).

5. DISCUSSION

In the history of Gabon, most civil society organizations came into being in the 1990s. Women, in particular, have set up several associations to defend their rights (women, children, health). Women’s

TABLE III: ANOVA RESULTS OF THE REGRESSION MODEL

	Sum of squares	df	Mean square	F	p
Regression	0.004	2	0.002	1.503	0.308
Residual	0.007	5	0.001		
Total	0.011	7			

TABLE IV: COEFFICIENT TABLE OF THE REGRESSION MODEL

Variables	Unstandardized coefficients		Standardized coefficients	t	p
	B	Std. error	Beta		
(Constant)	1.564	0.225		6.935	0.001
Parents	0.303	0.177	0.714	1.707	0.148
Male drivers	-0.072	0.109	-0.276	-0.660	0.539

associations are moreover considered the most active in the country (Oyane Nzue, 2013). Thanks to the launch of the African Women's Decade in 2010, Gabon is implementing initiatives to empower Gabonese women. Access to driving is one of these initiatives. This pilot study has objectives to see how the modes of thought evolve and if it is possible to identify this autonomy in social thinking.

A test of alternative choices (Gaymard, 2003; Malewska-Peyre *et al.*, 1982) based on eight 2-sided themes (inegalitarian = 1/egalitarian = 2) was completed by 41 Gabonese female drivers. They had to answer for themselves (standard condition), in place of their parents, and in place of the male drivers (substitution conditions).

So far, in work on normative models, the influence of reference models has been shown for students (Flament, 1999; Gaymard, 2003), high school students (Gaymard & Andrés, 2009), and even for teenage scooter riders (Gaymard & Bessin, 2017). The particularity of these studies was that they confirmed the reference to a model and, in part, the subjection to it. Thus, in their representation of higher education, students or high school students are subject to teachers and/or parents. In their representation of driving, teenage scooter riders are subject to their peers.

In the present study, assumptions related to empowerment were made. Three of the four hypotheses were verified. Female driver's choices are closer to the egalitarian model (H_1), while they attribute more inegalitarian choices to their parents (H_2) and the male drivers (H_3) (overall mean myself = 1.918; parents = 1.503; male drivers = 1.405). Previous work on women of North African origin had already shown differences (Gaymard, 2003); their choices were predominantly Western, while they attributed traditional choices to their parents.

The themes of the alternative choices were different (inequality or equality of tasks for women and men; inequality or equality in access to studies; respect for virginity or not; respect for religion or not; endogamy vs. exogamy), as well as the problem of the women interviewed (between two cultures; in agreement with their family or in the family breakdown). In the present study, the parents appear less traditional (or inegalitarian), which can be explained by the problem of driving a car (less normative than the question of virginity, marriage, or religion) (Gaymard, 2003). For parents, the most inegalitarian choice bears on theme 2 (having a male driver is more reassuring than a female driver), and the less inegalitarian concerns theme 4 (the woman behind the wheel is not a dreamer. She knows how to avoid disasters, drives more carefully than the man while respecting the road-users). We can say that "stereotypes die hard" when all the statistics show that men are more accident-prone than women (e.g., Al-Balbissi, 2003; Cordellieri *et al.*, 2016).

The model of "male drivers" is the most inegalitarian, and this can be explained through the function of stereotypes. According to Tajfel (1981), stereotypes justify social events and provide an explanation for intergroup behavior. They also result from an intention to distinguish one's group positively in comparison with another group (Hogg & Abrams, 1988). Therefore, stereotypes have a social differentiation function. One could also have expected that this instruction would play the role of a stereotype threat, but it seems to have exacerbated the feeling of ability among women.

One of the most traditional is that of math-gender stereotypes, and several studies have shown that this mechanism can negatively affect the female group (e.g., Starr & Simpkins, 2021; Walsh *et al.*, 1999). In the field of driving, Moè *et al.* (2015) demonstrated that stereotype threat causes women to perform worse in a driving simulation task.

In this study, it is interesting to note that it is also theme 2, which is the most inegalitarian for male drivers. Thus, there is a consensus on the parental model. We also note that the most egalitarian theme attributed to male drivers is theme 5 (The level of education or diploma should not be a means of acquiring a license for Gabonese women). This result can be compared to the study by Gaymard (2003).

One of the themes focused on inequality vs. equal access to studies for men and women. This theme emerged as the most Western choice given to parents (Girls and boys should receive the same education and pursue higher education without discrimination.). The most inegalitarian choices attributed to male drivers are the four first themes. Apart from themes 2 and 4, which we have already discussed, themes 1 and 3 refer to inequalities in driving (“Women are not made for driving; they must have the role of spectator and passenger,” and “Women are not allowed to drive bigger vehicles than men”). This last proposal helps to understand the challenge launched by training women to drive heavy machinery (program *com’elles*) (Dionzou & Gaynard, 2023).

Hypothesis 4 focused on the results of multiple regression (The “parental” variable will have more weight than that of male drivers). The results are not conclusive, leading us to reject this hypothesis. Several studies have shown the relevance of this approach. Flament (1999) was able to show that answers collected in the studies of SR reproduced the existence of normative models. The comparison of the profiles showed the influence of the models “well seen” by the teachers and the parents on the answers to the standard questionnaire. When students answer the standard questionnaire, they are influenced by these models. Flament also shows that the peer model has no weight.

Gaynard (2003) hypothesizes that female students of North African origin, in a negotiation situation with their parents, respond like women who are well-seen by them. Multiple regression analysis verifies the weight of this condition (beta coefficient = 0.94), whereas the Western model bears no weight (beta coefficient = 0.12). A study of teenage moped riders used the same methodology with “parents” and “peers” as independent variables (Gaynard & Bessin, 2017). The peer model has the most weight (Beta coefficients = 0.87). Thus, the responses in the standard condition are largely influenced by this model, which is a good predictor. The regression model explains 73% of the total variance.

In the present study, the independent variables were represented by parents and male drivers. The hypothesis that the parents variable would have more weight was put forward compared to previous studies. Given the R^2 (38% of the variability of the dependent variable “myself” is explained by the two explanatory variables), the variables do not provide significant information to the model. Contrary to previous studies, the representation of female drivers is influenced neither by the parental model nor by the male driver model, even if they are indeed capable of having other representations than their own (Campbell *et al.*, 1996).

The empowerment of Gabonese women could lead to a distancing from the parental model, which may be a result of the African Women’s Decade. The report details progress across the African continent around the ten themes of the African Women’s Decade (2010–2020) on “Grassroots Approach to Gender Equality and Women’s Empowerment.” The report mentions the important advances: “The African Women’s Decade was born in a landscape of tremendous strides towards gender equality despite relentless waves of constraints and pushbacks. During the decade, Africa surged forward with seminal pronouncements on gender equality” (African Union, 2022, p. 22). It is also referred to the change of mentality and the university development of gender studies: “Public awareness and sensitization efforts have yielded changes in perceptions and behavior . . . growing interest among university students in doing research on gender. This is a growing practice in many universities on the continent, which now have departments of gender studies” (African Union, 2022, p. 24). However, the report notes that there are persistent barriers: “. . . persistent barriers continue to be cultural and social norms, the mindset of privilege for men, and limited financing which constrain implementation of policies” (African Union, 2022, p. 24). A program to reduce stereotypes, particularly among men, could be put in place.

The limitations of this study concern the lack of prior measurement (before the implementation of the African Women’s Decade in 2010). As an extension of this pilot study, it is planned to study the evolution of social thinking, specifically among the women who make up the “*Com’elles*” group.

CONFLICT OF INTEREST

The authors declare that there are no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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