Parental sex-preferences in South Africa: culture and family composition

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Abstract

The study investigates parental sex-preferences for children in South Africa, using answers to the 2016 DHS survey. Some 8514 women and 3618 men were asked about the ideal composition of their family. Results show major differences between women and men: women were more often indifferent (11.9% vs. 9.9%), equalitarian, i.e. preferring the same number of boys and girls (53.1% vs. 43.1%) or preferring more girls (16.7% vs. 8.4%) than men, while men were more likely to prefer more boys (37.6% vs. 18.3%). The relative preference for girls was therefore 4.1 larger for women than for men. Several socio-economic factors were investigated: urban residence, level of education, household wealth, and exposure to media, but had hardly any impact on sex-preferences. In contrast, cultural and ethnic factors were strong. White/European groups had higher preference for boys, while Black/African groups showed virtually no differential preference between boys and girls, like in nearby southern African countries. Some minor differences could be noted among ethnic groups, in particular among Zulus and Xhosas. At ethnic level, nuptiality, in particular polygyny, and household structure showed a correlation with sex-preferences. Lastly, current family composition had an effect on stated preferences, showing that on average men and women were rather satisfied with the sex-composition of their family.

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Introduction

All over the world, women and men express preferences about the sex-composition of their family, that is the number of boys and girls that they would prefer to have, or to have had. This topic was extensively reviewed by Nancy Williamson in the early 1970's in her seminal work entitled "Sons or Daughters: a cross-cultural survey of parental preferences" (Williamson, 1976). Her study showed an overwhelming preference for balanced families, with equal number of boys and girls, and when a preference was expressed, a dominating preference for more sons than for more daughters. Her study was based primarily on North-American, European, Far-east Asian, and South-Asian countries, with special attention to the USA and to Taiwan, and made hardly any reference to sub-Saharan Africa.

There are many reasons why couples may prefer a balanced family, or more boys, or more girls, or even be indifferent. These arguments were well presented in Williamson's book. They refer to economic reasons, to social reasons, and to psychological reasons, to which one could add socio-political reasons. In each case preferences could go either way, in favour of boys or in favour of girls. Among economic reasons, the perceived economic value of the child, present and future, may affect the balance: if the boy is seen as a potential provider of food, money, shelter and other commodities parents may prefer boys; if the girl is seen as a potential provider of help for household chores and old-age support, parents may prefer girls. When parents want to give equal economic opportunities to their children or when they feel concerned by marriage prospects for their children, they may be indifferent or prefer a balanced family composition. Among social reasons, the social value of children may affect the balance: for inheritance, for transmission of names and social status, for rituals etc., here again either way depending on the local culture (patrilinear, matrilinear or bilinear). Patrilineal societies may prefer boys, while matrilinear societies may prefer girls, and bilinear societies may be indifferent. Psychological reasons may depend of the family situation: mothers may prefer girls around them for exchange and support, while fathers may prefer boys for sharing a variety of activities (sport, games, etc.). Socio-political reasons also depend on the local political situation. For instance, in stable, peaceful and prosperous societies families may prefer boys, while in unstable and violent societies families may prefer girls, although the opposite could occur as well depending on the perceived risks for survival or the need to defend the family. And in each case, preferences may differ between mother and father, and may evolve over time, depending on the family situation and the number of children already born. Preferences could also be affected by a variety of socio-economic factors, in particular wealth and education as well as by fashion and exposure to media. In brief the matter is complex and multi-factorial, and preferences could evolve either way for a variety of reasons. Other authors have already noted the complexity of the matter (Hank, 2007). It seems therefore illusory to search for an unifying framework, since preferences deal with economic, demographic, social and psychological factors, and with perceptions of those rather than objective situations.

With the development of large demographic surveys, such as the World Fertility Surveys (WFS) and the Demographic and Health Surveys (DHS), more data on sex-preferences became available. Much was learned from these surveys about Asian and Latin-American population, and some African populations were also analysed. Cleland et al. (1983) studied WFS surveys conducted in 27 countries, of which only two were located in sub-Saharan Africa (Lesotho and Kenya). The WFS surveys did not ask about the ideal composition of the family, but only about the desired sex for the next child, given the actual composition of the family. In about half of the countries (14/27), mainly located in Asia, women expressed a preference for the next child being a boy, while in the remaining countries, mainly located in Latin-America, they were either balanced or in favour of a girl. Fred Arnold studied extensively the first rounds of DHS surveys and compared results from 57 surveys conducted in 44 countries all over the world, of which 21 were located in sub-Saharan Africa (Arnold, 1992, 1997). The author concluded to the special situation of African countries compared with Asian and Middle-Eastern countries, without further investigation within Africa. Kana Fuse pursued this investigation while more data became available, and studied 50 countries, of which 28 were located in Africa (Fuse, 2008, 2010). This author was the first to include women with no preference in the analysis. Other studies focused on selected African countries, such as Nigeria (Adebowole et al., 2014; Isiugo-Abanihe, 1994; Jibril & Kawuwa, 2017; Ndu & Uzochukwu, 2011; Obikeze, 1988) and Ghana (Frempong & Codjoe, 2017). A recent study revealed the large variations of sex-preferences within African countries, and the special situation of Southern Africa compared with other areas in the continent, where preference for girls is more frequent than preference for boys (Garenne et al., 2023). It seems that South Africa was never investigated per se. Also, correlates of sex-preferences were poorly investigated, beyond large cultural and urban/rural differences.

The aim of this study was to investigate parental sex preferences in South Africa, a country never included in comparative analyses. South Africa has also a peculiar ethnic mix, a complex history, atypical demographic features and a level of development far above any other African country. This study focuses on socio-economic, demographic, and cultural factors of sex-preferences, as they are expressed in demographic surveys.

Data and methods

The 2016 DHS survey was utilized for studying sex-preferences in South Africa (National Department of Health et al., 2019). The survey was based on a representative sample of 11,083 households, in which women age 15–49 and men age 15–59 were asked about their sex-preferences, that is the number of boys (M) and girls (F) that they considered as ideal. Answers included the possibility of indifference. The precise question asked in the survey focused on the preference of men and women before they had any child; "If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? How many boys? How many girls".

Answers to these questions allow one to classify respondents into four categories: indifferent (M ~ F); prefer equal number (M = F); prefer more boys (M > F); prefer more girls (F > M). Beyond the proportion of women and men in each category, one indicator of relative preference for boys versus girls was calculated as the ratio of the last two categories (M/F). When this ratio is 1, there is no relative preference for either sex; when it is higher than 1, relative preference is for boys; than it is lower than 1, relative preference is for girls.

The statistical analysis of sex-preferences included several levels of stratification: socio-economic, demographic, and cultural, all based on variables available in the DHS survey. Socio-economic variables included urban residence, level of education (4 levels), household wealth (5 quintiles), and exposure to media (on a scale from 0 to 6). Demographic variables included sex-composition of the family (number of surviving children of each sex), nuptiality (marriage, polygamy), and household structure. Cultural variables included population group (4 racial groups), and ethnicity (13 ethno-linguistic groups). The statistical analysis included both univariate analysis (cross-tabulation), and basic multivariate analysis with a linear-logistic regression, and standard statistical testing. Calculations were done with SPSS-17. The linear-logistic model could be written as:

$$logit(p_i) = \log\left(\frac{p_i}{1 - p_i}\right) = \beta_0 + \sum_k \beta_k X_k + \varepsilon, \quad k = 1, \dots, K.$$

where p_i is the preferred category (p_m for more boys, p_f for more girls), X_k are the covariates, and β_k the coefficients. The difference between the coefficients β_k for more boys and more girls measures the Log-Odds-Ratio of M/F, which allows testing for differential attitudes between the sexes (relative preference).

Results

Overview on sex-preferences in South Africa

The sample size of the 2016 DHS survey was rather small for such a survey, with 8514 women and 3618 men interviewed (typical sample size for round 7 DHS surveys include some 15,000 women and 7000 men). Overall, a majority of men and women expressed a preference for a balanced number of boys and girls or said that they were indifferent to family composition. However, large differences appeared between men and women. Women were somewhat more indifferent than men (11.9% vs. 9.9%; P < 0.001), and they were also more equalitarian, i.e. preferring the same number of boys and girls (53.1% vs. 44.1%, P < 0.0001). When they expressed a preference for one sex, women were almost balanced: 18.3% preferring more boys and 16.7% preferring more girls. In contrast, men were much more oriented towards boys (ratio 2.1–1), and much less towards girls (ratio 1–2.0), all ratios being highly significant (P < 0.0001). As a result, the relative preference of boys versus girls (ratio M/F) was only 1.09 for women but 4.45 for men, revealing a large difference in attitudes towards family composition between men and women (Table 1; Fig. 1).

Table 1 Basic indicators of sex preferences in South Africa, 2016 DHS

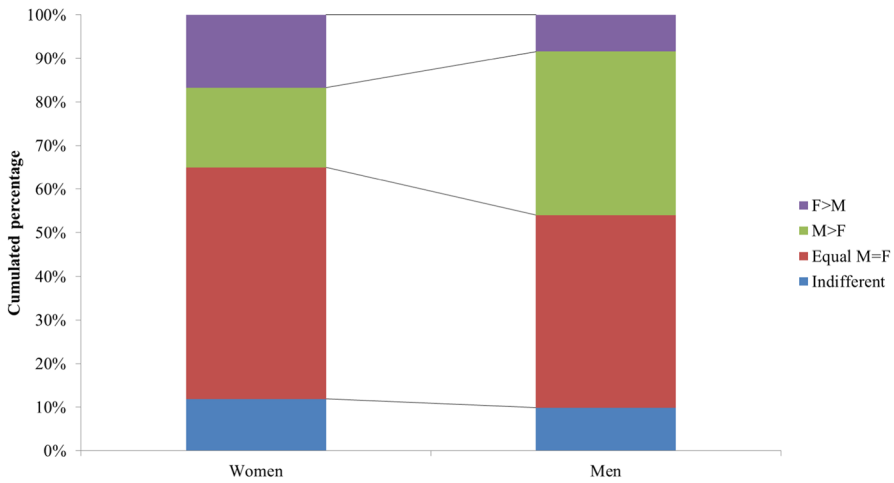| Population	Sample size	Parental sex-preference				Ratio boys/girls
		Indifferent	Equal	More boys	More girls	
		M~F (%)	M=F (%)	M>F (%)	F>M (%)	M/F
Women 15–49	8514	11.9	53.1	18.3	16.7	1.09
Men 15–59	3618	9.9	44.1	37.6	8.4	4.45

NB: the ratio M/F is calculated as (M>F/F>M)

Fig. 1 Distribution of sex preferences among men and women, South Africa, 2016 DHS

Socio-economic factors

Several socio-economic factors were studied: urban residence, level of education, household wealth, and exposure to media. All details are provided in the Table 8 in Appendix. These factors usually have a strong impact on demographic variables related to fertility, mortality, and nuptiality. In contrast, they had hardly any impact on sex-preferences. Urban residence had a small and negative impact on preference for more boys among women; level of education had a small positive impact on preference for more boys among men, whereas household wealth had a small negative impact in the same group. Exposure to media had no significant impact (Table 2).

Sex composition of the family

Family composition was defined by the number of boys and girls surviving among those born to the respondent, mother or father. Families were distributed into four categories, similar to those used for sex-preferences: women or men without

Table 2 Net effect of socio-economic indicators on sex-preferences in South Africa, 2016 DHS survey

Indicator	Women 15–49			Men 15–59		
	More boys	More girls	Ratio	More boys	More girls	Ratio
Urban residence	−0.177*	+0.002ns	−0.178ns	+0.071ns	−0.119ns	+0.190ns
	P=0.011	P=0.982	P=0.074	P=0.377	P=0.388	P=0.234
Level of education	+0.073ns	+0.095ns	−0.022ns	+0.139*	−0.045ns	+0.184ns
	P=0.206	P=0.115	P=0.791	P=0.029	P=0.681	P=0.148
Household wealth	+0.050ns	+0.010ns	+0.040ns	−0.095*	−0.024ns	−0.071ns
	P=0.060	P=0.717	P=0.292	P=0.004	P=0.679	P=0.288
Exposure to media	−0.006ns	−0.027ns	+0.021ns	−0.008ns	+0.069ns	−0.077ns
	P=0.739	P=0.126	P=0.387	P=0.728	P=0.090	P=0.099

NB: Net effect in multivariate linear-logistic regression. (*) $p < 0.05$; (ns) not significant

Model is $\text{Logit}(p) = B0 + B1 \times \text{URBAN} + B2 \times \text{EDUCATION} + B3 \times \text{WEALTH} + B4 \times \text{MEDIA}$

children, with the same number of boys and girls, with more boys, and with more girls. For women who had no children or the same number of boys and girls, preferences for more boys or more girls were about the same, with a ratio of 1.03 and 1.04, not significantly different from 1. When women had more boys they expressed a preference for more boys (27.9% vs. 12.0%; P<0.0001), whereas when they had more girls they expressed a preference for more girls (24.9% vs. 11.7%, P<0.0001). In summary, their relative preference for girls doubled when they had effectively more girls (2.12 vs. 0.97).

Differences by family composition were also large for men. When men had no child, they express a large preference for boys (37.5% vs. 7.9%, R=4.74, P<0.0001). When they had the same number boys and girls, their preference for boys was reduced, that for girls even more, and as a result the ratio of boys/girls was doubled (R=8.43). When they had more boys, their preference for boys increased, but their preference for girls decreased, again with a ratio boys/girls almost doubled (R=8.07). In contrast, when they had more girls, their preference for boys decreased somewhat to 33.5%, and their preference for girls almost doubled to 15.2%, so that the ratio boys/girls was halved, which means that their relative preference for girls versus boys doubled (from 0.21 to 0.45) as was the case for women (Table 3; Fig. 2).

Cultural factors

South Africa has a complex ethnic mixing. Usual statistical classification, as in DHS surveys, distinguish four population (racial) groups, some 11 ethno-linguistic groups among Back/Africans, and two ethno-linguistic groups among White/Europeans. Among the population groups differences were large. Among women, preference for more boys was highest for White/European and lowest for Indian/Asian, while preference for more girls was highest for Black/African and lowest for White/European. Among men, preference for more boys was highest for Black/African and lowest for Indian/Asian, while preference for more girls was highest for Coloured

Table 3 Relationship between sex-preferences and family composition in South Africa, 2016 DHS

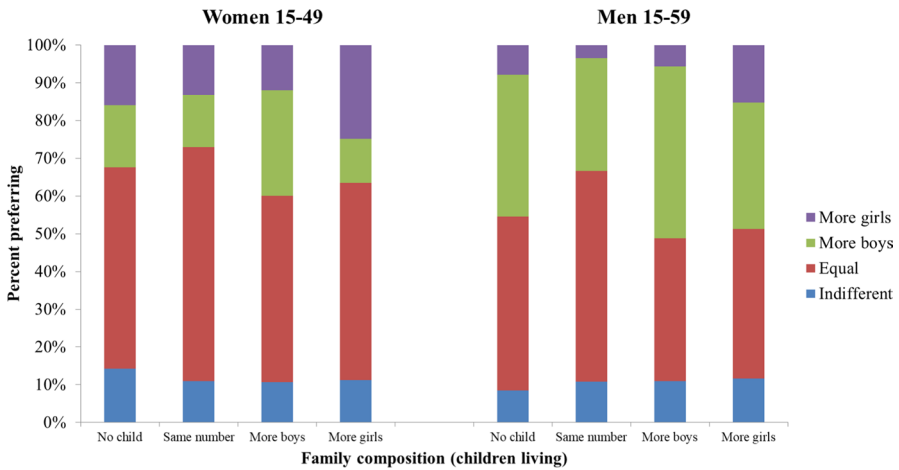| Family composition	Women 15–49			Men 15–59		
	More boys (%)	More girls (%)	Ratio	More boys (%)	More girls (%)	Ratio
No child	16.5	16.0	1.03ns P=0.671	37.5	7.9	4.74* P<0.001
Same number	13.8	13.3	1.04ns P=0.707	29.8	3.5	8.43* P<0.001
More boys	27.9	12.0	2.32* P<0.001	45.5	5.6	8.07* P<0.001
More girls	11.7	24.9	0.47* P<0.001	33.5	15.2	2.20* P<0.001

NB: (*) $p < 0.05$; (ns) not significant

Fig. 2 Relationship between sex-preferences and family composition, South Africa, 2016

and lowest for White/European. In brief, preferences had complex relationships with population groups, not related with level of income or education (Fig. 3).

Relationships with ethnicity added further complexity. However, due to the small sample size, many of the differences between ethnic groups were not significant. Differences with the average revealed some minor differences. Among Black/African women, Zulu showed somewhat more preferences for more boys, while Xhosa showed somewhat more preferences for more girls. Among White/European, there were no difference between English and Afrikaans speaking groups. Among Black/African men, Zulu and Shangaan showed a more pronounced preference for more boys. Among White/European men, the difference in preference for more girls between English and Afrikaans speaking groups was striking, but not statistically significant (Table 4).
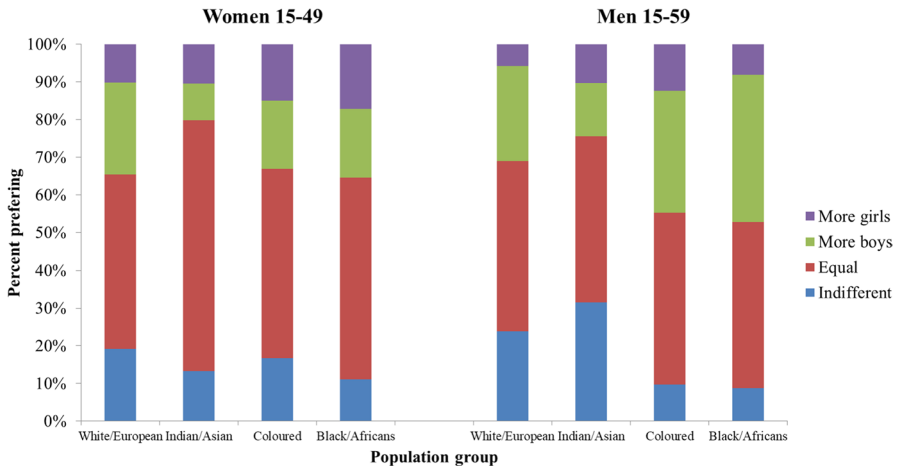
Fig. 3 Relationship between sex-preferences and population group, South Africa, 2016

Household structure

The structure of South African households is very peculiar compared with other African households. The 2016 DHS showed a large proportion of single person households (23.8%), a small proportion based on a couple (35.6%), and among the others (40.6%) a very large proportion of female headed households (80.6%). Furthermore, the survey also revealed a large proportion of households without a woman age 15–49 (37.4%), a large proportion of households without a man age 15–59 (30.9%), and a large proportion of households with grand-children (22.6%), especially among female headed households (36.6%). In addition, large proportions of households included other male relatives (9.4%) or other female relatives (7.8%). In this study, the presence of other male relatives was an indicator of a more patrilineal type, while the presence of other female relatives was an indicator of a more matrilineal type, even though it should be recognized that all these structures are complex, and far from traditional African household structures.

The statistical analysis showed that, for women, a male head was increasing the preference for boys, while for men the effect was smaller and not significant. Conversely, for women, a female head increased significantly the preference for girls, but the effect was not significant for other men living in the household. The presence of female relatives had a negative impact on the preference for boys for women, but again the effect was not significant for men. The coefficients of preference for more boys or for more girls were always from the opposite sign, for both men and women. As a result the relative preference of boys versus girls was affected by all indicators of the household structures, but the effect was significant only for women, not for men. In brief, more children and the presence of other female relatives induced a lower M/F ratio, while the presence of male relatives induced a higher M/F ratio (Table 5).

Table 4 Relationship between sex-preferences and ethno-linguistic groups, South Africa, 2016 DHS

Ethno-linguistic group	Women 15–49			Men 15–59		
	More boys (M>F) (%)	More girls (F>M) (%)	Ratio (M/F)	More boys (M>F) (%)	More girls (F>M) (%)	Ratio (M/F)
Black/African	18.2	17.2	1.06	39.1	8.2	4.77*
			P=0.152			P<0.001
Zulu	20.0	15.7	1.27*	44.1	6.0	7.36*
			P=0.002			P<0.001
Xhosa	14.2	19.3	0.74*	38.8	10.9	3.56*
			P=0.001			P<0.001
Tswana	16.3	16.1	1.01	36.8	8.3	4.45*
			P=0.962			P<0.001
Pedi	19.2	16.9	1.14	35.0	9.9	3.52*
			P=0.261			P<0.001
Sotho	19.4	16.9	1.14	35.5	7.4	4.80*
			P=0.255			P<0.001
Swazi	14.4	19.4	0.74	26.7	10.5	2.54*
			P=0.222			P=0.011
Shangaan	23.5	17.2	1.37	42.6	2.6	16.68*
			P=0.042			P<0.001
Venda	27.5	22.6	1.22	50.4	11.6	4.35*
			P=0.277			P<0.001
Ndebele	16.3	17.9	0.91	28.2	13.3	2.13
			P=0.782			P=0.089
Other B/A	15.4	16.9	0.92	37.8	8.5	4.46*
			P=0.516			P<0.001
Coloured	18.0	15.1	1.20	32.4	12.3	2.63*
			P=0.164			P<0.001
Indian/Asian	9.7	10.4	0.93	14.1	10.4	1.36
			P=0.864			P=0.563
White/European	24.4	10.2	2.39*	25.2	5.8	4.32*
			P<0.001			P<0.001
English sp.	22.3	9.7	2.29*	25.6	10.3	2.50*
			P=0.012			P=0.028
Afrikaans sp.	25.4	9.9	2.56*	24.6	1.4	17.00*
			P=0.006			P<0.001

NB: Difference from average: (*) $p < 0.05$; others were not significant

Correlation with polygamy at ethnic level

Polygamy (polygyny in this case) is not frequent in South Africa compared to West Africa, and the prevalence of polygamy seems to decline rapidly in South Africa. For instance, 11.2% of women were in polygamous union at the 1998 DHS, while

Table 5 Effect of household structure on preferences for boys and girls, South Africa, 2016 DHS

Household structure	Women 15–49			Men 15–59		
	More boys	More girls	R	More boys	More girls	R
Head, man	+0.1304*		*	+0.0525ns		ns
	P=0.025			P=0.496		
Head, woman		+0.1628*	*		+0.2420ns	ns
		P=0.007			P=0.061	
Nb of children	−0.0203ns	+0.0519*	*	−0.0435ns	+0.0104ns	ns
	P=0.0250	P=0.002		P=0.079	P=0.801	
Male relative	+0.1545ns	−0.1533ns	*	+0.0853ns	−0.2179ns	ns
	P=0.056	P=0.068		P=0.341	P=0.176	
Female relative	−0.2073*	+0.1216ns	*	−00117ns	+0.2184ns	ns
	P=0.009	P=0.115		P=0.0918	P=0.246	

NB: (p) Ratios M/F significant for all variables for women; None for men. (*) p < 0.05; (ns) not significant. Nb of children is the number of children currently living in the household

only 5.6% were so at the 2016 DHS, a prevalence halved in 18 years. Prevalence of polygamy among men was only 1.6% at 2016 DHS (no data were available in 1998). Black/African and Coloured groups were classified in three levels of high, medium and low prevalence of polygamy, and Indian/Asian and White/European were considered as not practicing polygamy. Results showed a mild correlation with preferences. Higher levels of polygamy were associated with less indifference, and more preferences for girls (Table 6).

International comparison (women only)

South Africa is unique in the continent, because of its complex population mix, its history, and its higher level of development. In terms of preferences for boys and girls, South Africa appears as close to other Southern African countries, and very different from countries further north, in particular from countries located

Table 6 Relationship between sex-preferences and prevalence of polygamy in each ethnic group, South Africa, 2016 DHS

Level of polygamy (women)	Sample size	Women's sex-preferences				Ratio of preferences M/F
		Indifferent M~F (%)	Equitable M=F (%)	More boys M>F (%)	More girls F>M (%)	
High	876	7.3	50.9	22.5	19.2	1.17
Medium	4062	12.0	53.6	17.4	17.0	1.02
Low	3180	12.3	53.2	18.1	16.4	1.10
None	396	17.5	52.0	19.5	11.0	1.77

NB: Level of polygamy: "High"=Swazi, Shangaan, Venda; "Medium"=Zulu, Xhosa, Tswana; "Low"=Pedi, Sotho, Ndebele, Other African, Coloured; "None"=Indian/Asian, White/European

in Sahelian Africa and in North Africa. The proportions of indifferent women, women preferring equal numbers of boys and girls, or more boys, or more girls were similar to those in other Southern African countries, and very close when restricted to the Black/African groups. In particular, the relative preference of boys versus girls (the M/F ratio) was close to 1 (no real preference), while it was 1.14 in Central and Eastern Africa, 1.54 in Coastal West Africa, 3.25 in Sahelian Africa, 2.97 in North Africa and the Middle-East, and 6.24 in South Asia (Table 7).

Discussion

The situation of South Africa appears as outstanding when compared with other areas in the world, such as North-America, Europe, Middle-East, Far-East Asia and South-Asia, and bears some similarity only with Latin-America and the Caribbean. Southern Africa is unique in the world in terms of virtually equal maternal preferences for boys and girls, and South Africa is a typical example of this outstanding situation, as it is the case for nearby countries such as Lesotho, Swaziland, Angola, Mozambique, Malawi, Namibia, Zambia and Zimbabwe.

Comparison of the relative preference for girls versus boys (F/M) in South Africa (0.92) with neighbouring countries showed no difference with Lesotho (0.90), somewhat higher preference than in Swaziland (0.66), somewhat lower values than in Zimbabwe (1.06), Mozambique (1.06), and Angola (1.15), and lower values than in Malawi (1.47), Namibia (1.47), and Zambia (1.51), the last three countries being apparently the places where preference for girls is the highest. Lesotho seems to be close to the Sotho group in South Africa, while Swaziland seems to be close to the Zulu and Swazi groups, although precise comparisons are difficult due to the small size of the ethnic samples.

Table 7 Comparison of women's sex-preferences in South Africa with other areas in Africa and Asia

Large region	Sex-preferences, Women 15–49				Ratio
	Indifferent	Equal	More boys	More girls	
	M~F (%)	M=F (%)	M>F (%)	F>M (%)	M/F
South Africa	11.9	53.1	18.3	16.7	1.09
Southern Africa	12.3	53.3	15.6	18.8	0.83
Central & East Africa	21.3	44.7	18.2	15.9	1.14
Coastal West Africa	21.8	44.5	20.4	13.3	1.54
Sahelian Africa	24.9	36.8	29.3	9.0	3.25
North Africa & Middle-East	31.7	46.8	16.1	5.4	2.97
South Asia	18.0	56.7	21.8	3.5	6.24

Source: IPUMS/DHS (see Garenne et al., 2023). Southern Africa: 8 countries; Central & East Africa: 8 countries; Coastal West Africa: 5 countries; Sahelian Africa: 7 countries; North Africa & Middle-East: 5 countries; South Asia: 6 countries

The situation of White/European groups appears closer to any other European populations in Europe or North-America, with a marked preference for sons, and definitely different from Southern African populations.

The situation of Indian/Asian was unexpected, close to Black/Africans in terms of relative preference for girls, and definitely very different from that of any group in India, a country where preference for boys is one of the highest on record, and preference for girls one of the lowest. This shows that culture may evolve when placed in a different socio-political situation.

The fact that socio-economic factors had only a small impact, if not negligible, on preferences could have been anticipated, as most previous studies emphasized the role of cultural factors over socio-economic development. However, only few studies have investigated systematically the role of education, income and exposure to media, while urban/rural differences were probably over-valued in earlier studies in Asia. For instance, in Ghana, more education was found to lower any sex-preference, unlike in South Africa, but had no effect on the relative preference for boys (Frempong & Codjoe, 2017).

The role of current family composition on sex-preferences, as stated in demographic surveys, has been rarely investigated. However, other studies found the same effect in other places, such as Asia and the Middle-East (Arnold & Kuo, 1984).

Results from this study differ from those of another study conducted in South Africa, which was based on a different approach: the length of birth intervals (Gangadharan & Maitra, 2003). Our study focuses on stated preferences, which are "attitudes", whereas family control strategies such as spacing or limiting births are "practices" or "behaviours". Furthermore, the 2016 DHS survey showed no difference in the sex-distribution of the last birth in any population group, which could have been indicative of a differential behaviour.

Compared to other continents, sex-preferences for children remain very balanced in South Africa, as in nearby countries. This situation is probably favourable to much equity between sexes, and South Africa is one of the few African countries where level of education of women and men are equivalent (together with Lesotho, Swaziland and Namibia), and where women's status is better than in many developing countries. Women's freedom and independence from men is also rather higher in South Africa than elsewhere, which has many positive features. Unfortunately, this situation has also some negative consequences, as shown by the high proportion of single mothers, and the high price paid by young women during the HIV/AIDS epidemic.

Appendix

See Table 8.

Table 8 Factors of parental sex preferences, South Africa, 2016 DHS

	Women's preference				Men's preference			
	More boys	More girls	Ratio	Sig	More boys	More girls	Ratio	Sig
	M > F (%)	F > M (%)	M/F		M > F (%)	F > M (%)	M/F	
Total	18.3	16.7	1.09	(ref)	37.6	8.4	4.45	(ref)
Demographic factors								
Age								
< 30	18.4	17.9	1.03	ns	37.7	8.9	4.23	ns
30–39	19.3	16.0	1.20	ns	42.2	7.7	5.48	ns
40+	16.8	14.9	1.13	ns	33.7	8.2	4.12	ns
Marital status								
Never in union	17.2	17.3	0.99	ns	38.7	8.5	4.52	ns
Currently in union	19.8	15.5	1.28	*	35.9	7.6	4.72	ns
Formerly in union	19.8	18.6	1.06	ns	36.2	12.8	2.84	ns
Sex composition of family								
None	16.5	16.0	1.03	ns	37.5	7.9	4.74	ns
M = F	13.8	13.3	1.04	ns	29.8	3.5	8.43	*
M > F	27.9	12.0	2.32	*	45.5	5.6	8.07	*
F > M	11.7	24.9	0.47	*	33.5	15.2	2.20	*
Place of residence								
Urban	17.8	16.7	1.07	ns	37.1	8.5	4.37	ns
Rural	19.3	16.8	1.15	ns	38.7	8.4	4.63	ns
Wealth quintile								
Poorest	15.2	16.3	0.93	ns	41.3	8.0	5.19	ns
Poorer	20.6	17.0	1.21	ns	37.7	8.6	4.38	ns
Middle	18.6	16.3	1.14	ns	39.2	8.1	4.83	ns
Richer	18.8	18.4	1.02	ns	36.4	8.1	4.52	ns
Richest	18.0	15.6	1.16	ns	32.9	9.6	3.41	ns
Level of education								
No education	18.2	12.9	1.41	ns	27.8	5.6	4.97	ns
Primary	16.0	16.6	0.96	ns	36.7	7.7	4.74	ns
Secondary	18.3	16.6	1.10	ns	38.6	8.5	4.54	ns
Higher	19.7	18.2	1.08	ns	34.7	9.8	3.56	ns
Occupation								
No work	17.6	16.8	1.05	ns	38.0	8.4	4.53	ns
Formal sector	20.3	17.6	1.15	ns	40.9	9.4	4.34	ns
Agriculture	18.1	16.6	1.09	ns	38.8	5.1	7.60	ns
Services	21.4	16.3	1.31	ns	36.3	9.0	4.04	ns
Manual work	17.1	16.8	1.02	ns	37.3	8.9	4.17	ns
Unknown	15.5	13.0	1.19	ns	33.0	6.4	5.16	ns
Exposure to media								
None	14.9	16.9	0.88	ns	35.9	5.6	6.38	ns
Low	19.7	16.9	1.17	ns	33.1	7.4	4.49	ns
Medium	18.7	17.3	1.08	ns	37.4	8.9	4.21	ns

Table 8 (continued)

	Women's preference				Men's preference			
	More boys M > F (%)	More girls F > M (%)	Ratio M/F	Sig	More boys M > F (%)	More girls F > M (%)	Ratio M/F	Sig
High	18.1	16.2	1.12	ns	39.2	8.7	4.53	ns
Population group								
Black/African	18.2	17.2	1.06	ns	39.1	8.2	4.77	ns
Coloured	18.0	15.1	1.20	ns	32.4	12.3	2.63	*
Indian/Asian	9.7	10.4	0.93	ns	14.1	10.4	1.36	*
White/European	24.4	10.2	2.39	*	25.2	5.8	4.32	ns
Ethnicity (Africans)								
Zulu	20.0	15.7	1.27	*	44.1	6.0	7.36	*
Xhosa	14.2	19.3	0.74	*	38.8	10.9	3.56	ns
Tswana	16.3	16.1	1.01	ns	36.8	8.3	4.45	ns
Pedi	19.2	16.9	1.14	ns	35.0	9.9	3.52	ns
Sotho	19.4	16.9	1.14	ns	35.5	7.4	4.80	ns
Swazi	14.4	19.4	0.74	ns	26.7	10.5	2.54	ns
Shangaan	23.5	17.2	1.37	ns	42.6	2.6	16.68	*
Venda	27.5	22.6	1.22	ns	50.4	11.6	4.35	ns
Ndebele	16.3	17.9	0.91	ns	28.2	13.3	2.13	ns
Other B/A	15.4	16.9	0.92	ns	37.8	8.5	4.46	ns

NB: Testing differences from the mean ratio (M/F) for each sex of the respondent. Complement to 1 of the sum of preferences for boys or girls reflects the lack of preference (either indifferent or equalitarian)

Declarations

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