UNIVERSIDADE FEDERAL DE MINAS GERAIS Faculdade de Ciências Econômicas Programa de Pós-graduação em Demografía

Barbara Unice Adams

DEMOGRAPHIC TRANSITION OF THE SURINAME MAROON POPULATION: a case study about the fertility and reproductive behavior change in an urban region

Belo Horizonte

2020

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Final Version

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Supervisor: Profa. Laura Lidia Rodriguez Wong

Co- supervisor: Prof. Rogério Brittes W. Pires

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To my dad Luciën, J. Adams, a couple of months before your death, you asked when I would continue studying.

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Abstract

The Maroon population, descendants of runaway African slaves, experienced an apparently striking population increase between 2004 and 2012. Maroons have the highest fertility level compared to other ethnic groups in Suriname. On the assumption that fertility transition towards lower level characterizes a demographic transition, the study aims to identify the fertility changes in the Maroon population and examine the factors that could indicate if those living in the urban area of Suriname are undergoing a demographic transition. Quantitative and qualitative methods were used to perceive changes in the reproductive behavior of Maroon women. The MICS 2010 and MICS 2018, allowed us to detect those changes and to evaluate whether they are undergoing a demographic transition. On the other hand, the results from the in-depth interviews gave a profound understanding of the quantitative findings. The focus was on reproductive behavior in a sample of resident women in the Paramaribo Metropolitan area. The Maroon population has reached a Total Fertility Rate of 4,1 in 2018, after a decline of 23 percent since 2010. However, it remained at a relatively high level compared to the other ethnic groups in Suriname. The study shows that the decline could be explained by factors such as urbanization and other socio-demographic characteristics that are present in most populations that have experienced a demographic transition. Qualitative results also point to some changes, such as the practice of polygyny, and the attitudes concerning contraceptive use of the immediate social environment, i.e., family and partner. Modernization did not result in ending traditions. It may, however, have reduced the importance of certain practices. Other factors help to understand why fertility remains high compared to other ethnic groups in Suriname. There is still a manifested pronatalist culture, and certain reproductive rituals are still very crucial, especially for Maroon women. The study focused on the use of contraceptives as one of the mechanisms that induce fertility change. While the total prevalence of contraception remained stable, its age pattern changed, being higher at the central ages of the reproductive period than before, which may explain why fertility decreased. The qualitative findings do indicate that Maroons are knowledgeable about and have access to modern and cultural methods to

either stimulate or prevent pregnancies. Maroons, given the changes in fertility, are experiencing a demographic transition. However, the prescribed stages of the theoretical transition model cannot be entirely applied to Maroon societies. Specific demographic characteristics that facilitate fertility transition were already present before the advent and influence of any modernization process among the Maroons. Cultural attitudes play an essential role in avoiding reaching very low fertility levels.

Keywords: Demographic transition, fertility transition, Maroon, Suriname, proximate determinants, cultural attitudes, qualitative research, quantitative research, MICS.

Resumo

A população maroon é um grupo étnico de origem africano que arribou a Suriname fugindo da escravidão. Mais recentemente, teria apresentado forte crescimento populacional (censos 2004 e 2012), tendo o mais alto nível de fecundidade comparativamente aos outros grupos étnicos do Suriname. Partindo do pressuposto de a transição da fecundidade para níveis mais baixos caracterizar uma transição demográfica, o estudo tem como objetivo identificar as mudanças na fecundidade da população maroon e avaliar se quem reside na área urbana do Suriname estaria, já, passando por uma transição demográfica. Foi utilizada metodologia quantitativa e qualitativa para avaliar as mudanças no comportamento reprodutivo de mulheres maroon. As MICS 2010 e 2018 permitiram detectar essas mudanças indicativas de uma transição da fecundidade e consequentemente demográfica. As entrevistas em profundidade, por sua vez, permitiram uma compreensão mais abrangente dos achados quantitativos. O foco foi o comportamento reprodutivo em uma amostra de mulheres residentes na região metropolitana de Paramaribo. A população maroon atingiu uma taxa total de fecundidade de 4,1 em 2018, após um declínio de 23% desde 2010. No entanto, permaneceu relativamente alta comparativamente aos outros grupos étnicos do Suriname. O declínio, de acordo às evidências, explicar-se-ia por fatores como urbanização e características sociodemográficas presentes na maioria das populações que sofreram uma transição demográfica. Os resultados qualitativos também apontam para algumas mudanças, como na prática da poligamia e nas atitudes em relação ao uso de contraceptivos no ambiente social imediato, isto é, comunidade, família e parceiro. A modernização não resultou no fim ou diminuição das tradições, embora tenha contribuído à redução da importância de certas práticas. Outros fatores ajudam a entender por que a fecundidade permanece relativamente alta. Ainda existe uma manifesta cultura pronatalista e certos rituais reprodutivos que estimulam a fecundabilidade e a fecundidade ainda são cruciais, especialmente para as mulheres maroon. O estudo concentrou-se na prática contraceptiva como um dos mecanismos que induzem mudanças na fecundidade. Em que pese a constância do nível total da contracepção,

seu padrão de idade mudou, sendo a prática contraceptiva maior, nas idades centrais da vida reprodutiva, maior do que anteriormente; isto explicaria a diminuição da fecundidade no período. As descobertas qualitativas evidenciam o conhecimento e o acesso a métodos modernos e tradicionais para estimular ou prevenir a gravidez. Os maroons, dadas as mudanças na fecundidade, estão passando por uma transição demográfica. No entanto, as etapas prescritas do modelo teórico desta transição não podem ser inteiramente aplicadas às sociedades maroon. Características demográficas específicas que facilitam a transição da fecundidade já estavam presentes antes do advento e influência de qualquer processo de modernização nesta etnia. Atitudes culturais continuam desempenhando um papel importante que impediriam atingir níveis muito baixos de fecundidade.

Palavras-chave: Transição demográfica, transição da fecundidade, Maroon, Suriname, determinantes próximos, atitudes culturais, pesquisa qualitativa, pesquisa quantitativa, MICS.

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ed.	Editor
e.g	for example (exempli gratia)
i.e	that is (id est)
ADEK	Anton De Kom Universiteit van Suriname
ASFR	Age-specific fertility rate
CEB	Children Ever Born
DBNL	Digitale Bibliotheek voor de Nederlandse Letteren
HBO	Hoger Beroepsonderwijs
LAT	Living Apart Together
MICS	Multiple Indicator Cluster Survey
MICS6	Sixth global round of Multiple Indicator Clusters Surveys programme
SDG	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences
STI	Sexually transmitted infection
TFR	Total Fertility Rate
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund

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1. INTRODUCTION

1.1 Introduction

The Republic of Suriname is located along the northeast coast of South America and covers an area of 163,820 square kilometers. French Guyana borders it to the east, Guyana to the west, Brazil to the south, and the Atlantic Ocean to the north (Menke, 2016, p.23, In Menke, J (ed.), 2016).

Figure 1. 1 - Map: Districts of Suriname

Source: https://images.app.goo.gl/dNZjXM1mKEWbvLXU7

In 1499, Ojeda and de la Cosa discovered the coast of the Guianas. From 1650 to 1667, Suriname was under British rule (De Groot, 1974). From 1667, it became Dutch territory. From 1799 to 1814, Suriname was again under British authority. Suriname was under the jurisdiction of the Netherlands back from 1816 until independence in 1975. The import of slaves occurred since British rule (De Groot, 1974; De Groot, 1983); the abolishment of slavery took place in 1863. The recruitment of contract/indentured laborers from China, India, and the Indonesian island Java was necessary to supplement the shortage of laborers after emancipation. However, the free people still had to work on the plantations for ten years longer after 1863. Descendants of the indentured laborers are the Chinese, Hindustanis, and Javanese. In the past decades, more Chinese migrated to Suriname. The ethnic group known as the Creoles[1] are descendants of freed slaves at the abolition of slavery in 1863 (Helman, 1977). Creoles are also the children of the African slaves who were born in Suriname (Binnendijk and Faber, 1991; Hoogbergen, 1992/2015). Maroons that are the focus of this dissertation are the descendants of escaped African slaves. Maroons consist of six groups, each with their own culture and language: Saamaka, Ndyuka (also called Okanisi), Pamaka, Matawai, Aluku (also named Boni), and Kwinti. The case study conducted in the dissertation focus specifically on the Maroon population in Paramaribo and Wanica. The original inhabitants (or indigenous population) of Suriname are the Amerindians, which composed of the Carib, Arawak, Trio and Wayana tribes, having their specific cultures and languages. Maroons and Amerindians live in tribal communities. Finally, there are also other groups residing in Suriname, such as Lebanese, Jews, Europeans, Haitians, Brazilians, Guyanese.

Dutch is the official language. Sranan[2] is the lingua franca spoken by every Surinamese. Each ethnic group has its language. Languages spoken are Sarnami Hindustani, Javanese, Chinese, Maroon languages, and Amerindian languages[3]. Surinamese are able to speak two or more languages, and they can use different languages in a conversation, even in one sentence, when they speak -code switching

[1] In the Caribbean region, the term creole may mean, more generally, a person of African descent born in the Americas. In Suriname, the usage of the term excludes the Maroons

[2] The origin of the words is from African languages, Portuguese, English, and Dutch, (Binnendijk & Faber, 1992, p. 123), but it is linguistically considered an English- based Creole language

[3] Helman mentioned that more than 14 languages are spoken in Suriname (Helman, 1977, p.63)

as it is called (Helman, 1977; Binnendijk & Faber, 1992). Also, immigrants speak their mother tongues, such as English, Portuguese, and French[4].

In 2004, the population of Suriname was 492,829 and increased in 2012 (541,638); the population grew by approximately 1.2% annually (Sno, I and Ritfeld, E, 2016, p.78, in Menke, J (ed.), 2016). Available data indicate that fertility remained rather constant in recent times: a total fertility rate (TFR) around 2.5- 2.6 between 2004 and 2012. (Onderwijs, Werkgelegenheid en Vervoer, Vruchtbaarheid en Sterfte, Gezondheid en Sport. P. 36. Suriname in Cijfers no 299/2013-10x. Algemeen Bureau voor de Statistiek (ABS).

The various ethnic groups in Suriname have their religion, culture, and language. They have their rituals and traditions about life stages such as marriage, pregnancy, birth, puberty, death, etc. and, therefore, about fertility and reproduction.

This study aims to identify the fertility level of Maroon women in Suriname and to determine if these women are undergoing a process of fertility transition. This study focuses on one of the demographic processes, namely fertility. The change is believed to be inevitable, the timing and the speed of the transition, though, can be different, either delayed or rapid. Each country is said to have a unique transition experience. (Kirk, 1996, p.386). The historical transition in Europe that started during the late eighteenth century did not have a fixed list of factors that could explain the onset of fertility transition (Coale, 1984). This study will look at various determinants that will help to understand the stage of transition.

Hence, some background of the research population will follow.

[4] Every student is taught English in school. At secondary education, students can also choose to learn Spanish. Some secondary high schools also teach French

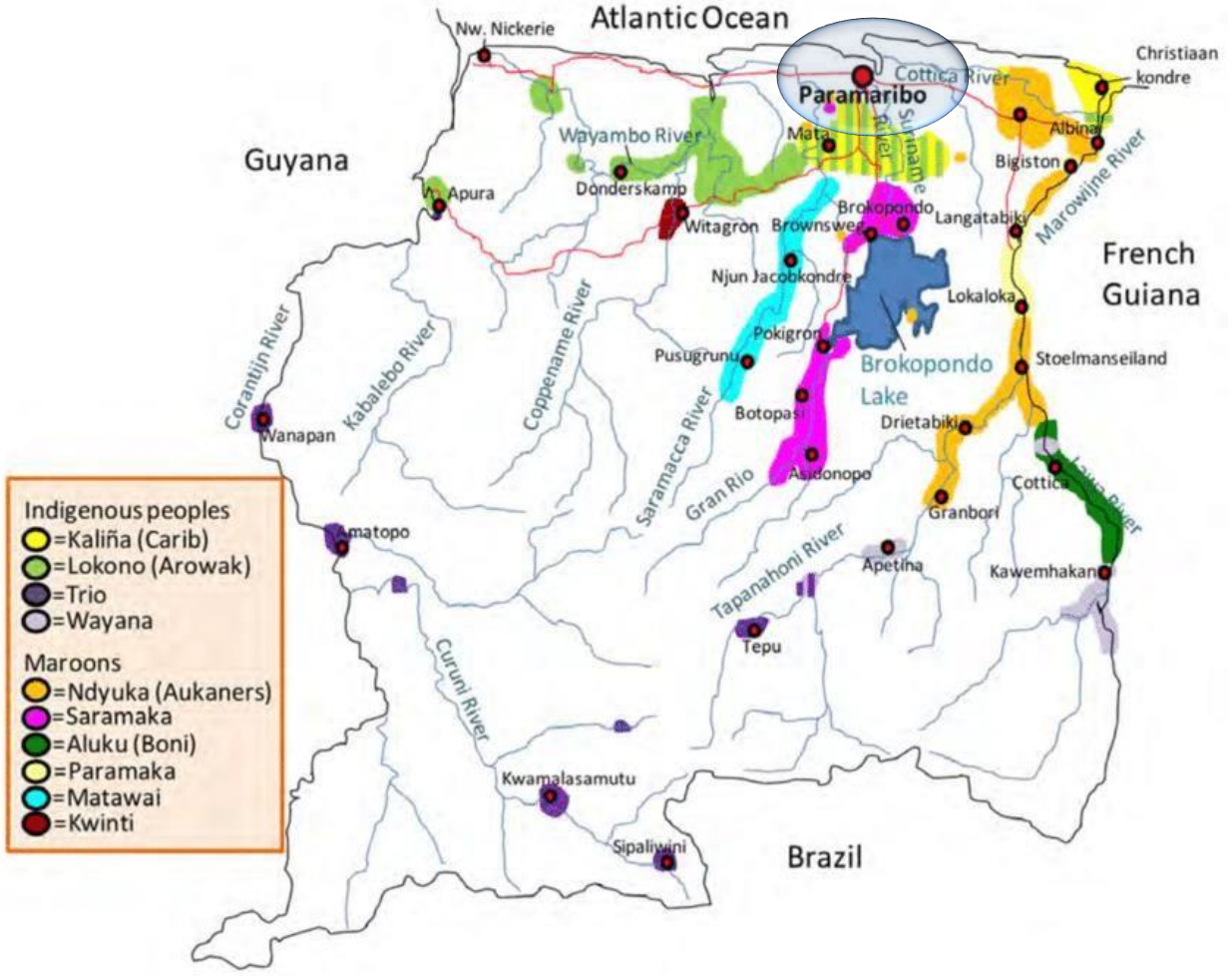
1.2 Research population

The research population in this study is the Maroon Women in the age groups 15 to 64 living in Paramaribo and Wanica.

The Maroons escaped from plantations during the period of slavery, 1650-1863. The Maroon creole languages can be divided between Eastern (Ndyuka, Boni, Paamaka, and Kwinti) and Western Maroon creoles (Saamaka and Matawai). The Eastern creole languages are English-based creole, and the Western are Portuguese-English based creole (van Binnendijk & Faber, 1992). The grammar of these languages resembles that of the African model (S. Price, 1984/1996, p.xxxi). Enslaved Africans were brought from the Gold Coast, the Bight of Benin, and west-central Africa (Fortes-Lima et al., 2017; Hoogbergen 1992/2015). Maroons also speak Sranan, the lingua franca (which is genetically related to Maroon creoles), and Dutch. Maroons, as any other ethnic group living in the urban region of Suriname, i.e., Paramaribo and Wanica, speak their languages as well as Sranan and Dutch.

Most Maroons still live in tribal communities. There are also Maroons living in the capital Paramaribo and other parts of Suriname, but they still maintain their culture and languages. The customs of the interior usually continue when one moves to the city (Schalkwijk, J. Marten, W, and Ritfeld, E, 2016, p. 193, in Menke, J (ed.), 2016). The Saamaka and the Ndyuka are the most significant groups among the Maroons in terms of population size. It is estimated that there are approximately 70,000 Saamakas and 58,000 Ndyukas living in Suriname (Richard Price, 2018). Besides the traditional religion, there are also Maroons who are Christians (although still maintaining their traditions). Many Maroons are also living in countries such as French Guyana (Overseas Department of France), and the Netherlands (former Metropolis).

Figure 1. 2 - Map of Suriname with approximate living areas of Maroons (and Amerindians, i.e., Indigenous population)



Source: Heemskerk, Marieke. 2009, p.3

Since the last Census, Maroons are the second largest ethnic group, comprising 22% of the people of Suriname (2012 Population Census). The other main ethnic groups are Hindustanis (27%), Creole (16%), Javanese (14%), Mixed (13%), Indigenous (3,8%) and Chinese (1,5) (see Table 1.1). The largest ethnic population is the Hindustanis. The Maroon population increased from 72.553 in 2004 to 117.567 in 2012 (Menke, J and Sno, I, 2016, p.115, In Menke, J (Ed.) 2016). The annual growth rate in this period was, therefore, approximately 6 percent (which seems too high as mentioned before). The General Statistics Bureau in Suriname indicated that in the Population Census of 2004, the category “no answer” was huge (i.e., 6,4%) for the self-identity ethnic question. They assumed that certain ethnic groups were overrepresented (such as the Maroons) among those that did not respond to identify

their ethnicity. On the contrary, a smaller percentage did not identify their ethnicity in 2012 (i.e., 0,2%). The Statistics Bureau mentioned that the increase of the Maroons in the period 2004 – 2012 could be explained by the following factors, namely births (57%), immigration (2,1%), and 'location 2004 unknown' (15,3%). The remaining 25% is the net result of emigration 2004-2012, deaths 2004-2012, and 'category jumping'. Category jumping referred to the large percentage, 6.4%, that did not identify their ethnicity in 2004 (Menke, J and Sno, I, 2016, p.117-119, In Menke, J (ed.) 2016; Algemeen Bureau voor de Statistiek, Volume 1, Demografische en Sociale karakteristieken en Migratie, 2013, page 23-24). The assumption was made that many Maroons refused to identify their ethnicity in 2004.

The Statistics Bureau analyzed the non- responses in the districts with a large concentration of Maroons in Census 2004 and their responses to ethnicity. The three areas with the highest concentration of Maroons, namely Brokopondo, Marowijne, and Sipaliwini, had significantly higher percentages for the category "no answer', respectively 20,1, 21,5, and 22,3% (see Table 1.2). However, the Census 2012 did not show significant differences in the percentages for "no answer" in these three districts compared to the remaining regions of Suriname (see Table 1.3). The portions for "no answer" in 2012 were 0,1 for each of these three districts (Menke, J and Sno, I, 2016, p.120-121, In Menke, J (ed.) 2016). They concluded that in 2004 a significant majority did not respond compared to a tiny percentage that did not react in Census 2012.

Overall, in 2004 the non-response was 6.4%, whereas, in 2012, this was 0.3%.

On the contrary, births contributed 57% to their growth (see table 1.5). Maroons have the highest numbers of births during the period 2004 – 2012 (the Inter-censal period) compared to other sub-populations.

Table 1.1 shows the percentage of the Suriname population by various ethnic groups during the Population Censuses from 1950 until 2012.

Table 1. 1 - Percentage Population by Ethnicity in Suriname, 1950 – 2012

Census year	**1950**	**1964**	**1971**	**2004**	**2012**
Ethnicity	**Percentage**				
Maroon	9,0	9,0	10,0	15,0	22,0
Creole	37,0	35,0	31,0	18,0	16,0
Mixed	0,0	0,0	0,0	12,0	13,0
Hindustani	31,0	35,0	37,0	27,0	27,0
Javanese	18,0	15,0	15,0	15,0	14,0
Amerindian/Indigenous	1,7	2,2	2,7	3,7	3,8
Chinese	1,2	1,6	1,7	1,8	1,5
Caucasian	1,3	1,3	1,0	0,6	0,3
Others	1,0	1,0	1,0	0,0	1,0
No response	0,0	0,0	0,0	6,4	0,3
Total %	100,0	100,0	100,0	100,0	100,0
Total #	204561	324211	384900	492829	541638

Source: Sno, I and Ritfeld, E, 2016, p.84, in Menke, J (ed.), 2016

Tables 1.2 and 1.3 show the difference in response among the Maroon population to ethnicity.

Table 1. 2 - Percentage of Population by Ethnicity by District in Suriname, 2004

District by Etnicity, Census 2004 (Percentage)													
	Etnic group												
District	Indigenous/ Amerindians	Maroon	Creole	Hindustani	Javanese	Chinese	Caucasian	Mixed	Other	Don't know	No response	Total	Total number
Paramaribo	2,2	9,8	27,5	22,0	12,1	2,8	0,7	16,6	0,6	0,4	5,3	100	242,946
Wanica	1,6	10,9	8,5	47,1	20,1	0,8	0,3	7,9	0,3	0,0	2,5	100	85,986
Nickerie	2,8	0,3	9,8	60,6	16,7	1,0	0,2	8,0	0,1	0,0	0,5	100	36,639
Coronie	1,5		75,5	3,3	11,3	0,7		6,2			1,5	100	2,887
Saramacca	6,7	0,6	8,1	52,8	20,9	1,0	0,5	8,1	0,7		0,7	100	15,980
Commmewijne	1,2	2,0	4,7	31,9	49,0	0,5	0,2	8,3	0,5	0,1	1,6	100	24,649
Marowijne	9,6	49,2	3,5	1,0	9,2	1,0	0,4	5,7	0,2		20,1	100	16,642
Para	16,6	17,4	19,5	7,1	15,4	0,9	0,6	15,4	0,2		6,9	100	18,749
Brokopondo	0,5	59,5	1,6	0,4	0,1	0,1	3,2	12,6	0,4	0,1	21,5	100	14,215
Sipaliwini	12,0	56,0	1,2	0,3	0,1	0,0	0,3	7,4	0,3	0,1	22,3	100	34,136
Total	3,7	14,9	17,7	27,1	14,8	1,7	0,6	12,5	0,5	0,2	6,4	100	492,829

Source: Menke, J, and Sno, I, 2016, p.121, in Menke, J (ed.), 2016 & Demografische en Sociale karakteristieken en Migratie, 2013, p21

Table 1. 3 - Percentage of Population by Ethnicity by District in Suriname, 2012

District by Etnicity, Census 2012 (Percentage)														
	Etnic group													
District	Indigenous/ Amerindians	Maroon	Creole	Afro-Surinamese	Hindustani	Javanese	Chinese	Caucasian	Mixed	Other	Don't know	No response	Total%	Total number
Paramaribo	1,7	16,6	25,5	1,2	22,9	10,0	2,1	0,4	18,0	1,3	0,2	0,2	100	240,924
Wanica	1,4	15,6	10,1	0,7	43,8	16,5	0,6	0,2	10,1	0,6	0,1	0,2	100	118,222
Nickerie	2,3	1,1	6,9	0,1	62,9	16,9	0,7	0,2	8,5	0,3	0,1	0,0	100	34,233
Coronie	0,9	0,9	72,5		1,4	16,2	1,6		6,2			0,2	100	3,391
Saramacca	5,9	1,2	8,7	0,3	51,2	20,9	0,6	0,4	10,0	0,8			100	17,480
Commmewijne	1,9	1,9	4,9	0,1	34,4	43,9	0,7	0,1	11,1	0,8	0,1	0,2	100	31,420
Marowijne	8,2	74,0	1,2	0,1	0,9	8,2	1,6		5,7	0,2		0,1	100	18,294
Para	20,1	20,2	13,6	1,1	8,2	13,7	0,5	0,5	21,4	0,5	0,2		100	24,700
Brokopondo	1,3	79,4	0,9	1,4	0,7	0,1	0,9	0,1	3,4	9,1	2,7	0,1	100	15,909
Sipaliwini	14,2	77,6	0,3	0,1	0,3	0,1	1,1	0,2	1,9	3,9	0,3	0,1	100	37,065
Total%	3,6	21,8	15,9	0,8	28,0	13,4	1,3	0,3	13,1	1,3	0,2	0,2	100	541,638

Source: Menke, J, and Sno, I, 2016, p.121, in Menke, J (ed.), 2016 & Demografische en Sociale karakteristieken en Migratie, 2013, p21

The research was done in the urban region in Suriname, mainly Paramaribo and Wanica.

1.3 Research area

The focus of the field research was on the district of Paramaribo and Wanica, mostly because of financial reasons (no funding, out of pocket) and convenience. Paramaribo is the capital of Suriname. Paramaribo and Wanica are the main urban areas in Suriname (Sno, 2011). The ethnic composition of the Paramaribo district is like the ethnic balance in Suriname. The three groups - Hindustani, Maroon, and Creole - who have the most significant share in the 2012 population, are also among the top three in Paramaribo (Menke, J and Sno, I, 2016, p.120, In Menke, J (ed.), 2016). The Maroon population living in Paramaribo grew from 9,8% in 2004 to 16,8% in 2012. In Wanica, the Maroons were 10.9% in 2004 and 15.6% in 2012 (Menke, J and Sno, I, 2016, p.120, In Menke, J (ed.), 2016) (see Tables 1.2 and 1.3).
Estimates from Richard Price also show that many Maroons are living in Paramaribo and surroundings being, i.e., 31.5% of the total Maroon population (see table 1.8).

Maroons who move to the city continue with their customs/traditions from the interior (Schalkwijk, J and Ritfeld, E, 2016, p. 193, In Menke, J (ed.), 2016).

The reasons why the other districts were not be included in this study have to do with accessibility (distance) and costs. Many Maroons live in the Sipaliwini district; being the villages quite remote and geographically spread, the only costly transportation to get there are airplanes and boats. In addition, in the districts were the Maroons live in villages, permission to conduct research should be requested of the authorities and inhabitants of the communities. The village will hold a “kuutu” (i.e., meeting) to decide on whether the research will be allowed.[5] In Paramaribo, this is not the case.

Furthermore, Maroon women in urban areas are responsible for a large percentage of births which is by itself, an important motivation to better understand the fertility transition, the object of this dissertation. Table 1.4 shows that most Maroon women (48,7%) live in the metropolitan area. The table also indicates that Urban Maroon women have relatively fewer births. Thus, they have lower fertility than their counterparts in other geographic regions of Suriname.

[5] This was the author’s experience while conducting empirical work for her Master thesis research in four Saamaka villages (Adams, 2003). See below

Table 1. 4 - Suriname (2004)- Maroon women aged 15 – 49, births and ratio births to women (percent) by place of residence[6]

Location	**Maroon women**			**Ratio births to women (%)**
	Absolute	**Relative (%)**	**Births**	
Suriname	18142	100	2614	14,41
Urban	8838	48,7	1007	11,39
Rural	965	5,3	160	16,58
Interior	8339	46	1447	17,35

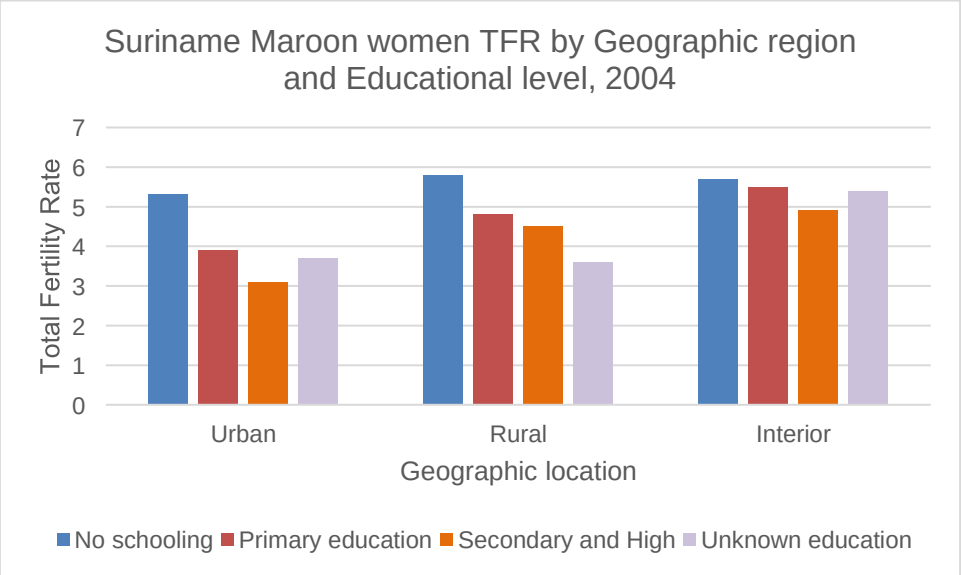
Source: Data from Table 5a: Aantallen Marronvrouwen en geboorten per geografische regio and Table 5b: Percentages Marronvrouwen en geboorten per geografische regio, p.5, Sno, (2011).

[6] Suriname is divided in three geographic regions namely Urban (Paramaribo and Wanica), Rural (Nickerie, Coronie, Saramacca, Commewijne and Para) and Interior (Marowijne, Brokopondo and Sipaliwini) (Sno, 2011). The interior is part of the Amazon rain-forest biome.

The results of the Census 2004 (see Figure 1.3) also indicate that Maroon women tend to have fewer children if they have higher educational levels. Women with no schooling in Suriname have the highest average number of children during their reproductive life.

Urban women have, on average, the lowest fertility level.

Figure 1. 3 - TFR by Geographic area and Educational level of Maroon women in Suriname, 2004



Source: Data from Table 5a: Aantallen Marronvrouwen en geboorten per geografische regio and Table 5b: Percentages Marronvrouwen en geboorten per geografische regio, p.5, Sno (2011).

Next, the objectives will clarify what the specific focus of the study is.

1.4 Objectives

The purpose of this study is to identify fertility change in the Maroon population and examine the factors that could indicate if those living in the urban area of Suriname are undergoing a fertility transition.

The specific objectives of this study are as follows:

- To identify quantitatively the fertility level of Maroon women compared to women of the rest of the ethnic groups in Suriname through statistical analysis of Surveys and Census data;
- To investigate whether Maroon women are undergoing a fertility transition;
- To identify quantitatively characteristics of the Maroons fertility pattern and reproductive behavior as, for instance, the contraceptive prevalence and age at given birth of Maroon women;
- To identify factors that can help give an understanding of the process of fertility change of the Maroon women by using a qualitative approach.

1.5 A context

A contextualization is necessary to explain the reason for the interest of this study.

The TFR of Suriname was 2.53 in 2004 and 2.56 in 2012; although this rate shows almost no change, the population, however, has increased. The sharp increase of the Maroon population from 2004 to 2012, is striking; the annual growth rate in this period was close to 6 percent. The main factors, according to the General Statistics Bureau in Suriname, to explain this growth are births, migration, and “location unknown,” which is probably due to differences in census coverage. This growth also resulted in the Maroons becoming the second largest ethnic group in Suriname in 2012.

The total fertility rate of 2004 (see Tables 1.5 and 1.6, and Figure 1.3) indicates that the various ethnic groups in Suriname show different fertility levels. The demographic transition of Suriname as a multi-ethnic society may have a variation in determinants that can explain these differences in fertility. Hence, the interest to study one of the main ethnic groups. The focus will be on the Maroon women in the urban region of Suriname, namely Paramaribo and Wanica. Table 1.5 indicates that the Maroons had the highest total fertility rate compared to the other ethnic groups in 2004. The increase of this group in recent decades, as mentioned, is another reason to justify the importance of this research.

Furthermore, the Maroon population also increased in Paramaribo from 9,8% to 16,8% and Wanica from 10,9% to 15,6%, respectively in 2004 and 2012 (Menke, J and Sno, I, 2016, In Menke, J (ed.), 2016).

There is no research done regarding demographic changes in Suriname. Therefore, this study will provide baseline data and literature/knowledge for further research in this area. This study can be used to expand and continue research among the Maroon population and other ethnic groups in Suriname.

Survey databases were used to measure the recent fertility level. Qualitative research was done to gain insight into various factors such as marriage, divorce, sexual behavior, reproduction, cultural and modern contraceptive methods, decision-making regarding partner choice/contraceptive use/reproduction, and family and partner

influences/involvement. The findings of the qualitative research will help to understand the developments in their fertility behavior.

1.6 Rationale

There are various reasons why the researcher found it essential to study the Maroon population. The rationale of the study is as follows:

Justification

- It is proportionately an important ethnic group, although the emphasis of the dissertation is on the fertility transition, the Maroon are at the earlier stages of the Demographic Transition.

Coale (1984, p.531) defined demographic transition as a set of changes in reproductive behavior that are experienced as a society shifts from a traditional pre-industrial state to a highly developed modernized structure. The demographic transition started in Europe, in 1750 with declines in mortality. The initiation of the fertility decline was before 1830 in France and after 1870 in other European countries.

The Demographic Transition model describes the shifting from high mortality and fertility rates to low mortality and fertility rates, and population growth rates as a country develop from pre-industrial to industrial society (Thompson, 1929; Notestein, 1945).
The model describes four stages, namely:

Stage 1: high birth rates and high death rates resulting in a meager population growth;

Stage 2: death rates begin to fall, and birth rates remain high leading to rapidly growing population;

Stage 3: birth rates start to decline, and death rates continue to decline. Population growth begins to level off; the natural increase is moderate;

Stage 4: both death- and birth rates are low, so that population also declines; population growth is low or zero population growth rate or even negative as a number of countries have already acquired (United Nations, 2019).

Several causes explained the significant changes in these demographic processes globally. Europe experienced a process of modernization, which brought control over disease, low mortality, and rising levels of living. Some factors were increased food supply through agricultural techniques, increases in products through industrial innovations, sanitary and medical advancement. Fertility began to fall in the latter part of the 19th century. This decline occurred because of fertility control, mainly through the practice/adoption of contraceptive use (Coale, 1984). Social and economic changes modified the motives and aims of people regarding family size (Notestein, 1945). Urbanization discouraged large families resulting in a new preference for smaller families (Davis, 1945).

Mason (1997), van de Kaa (2008), Reher (2011), Bongaarts (2017), indicate that the First Demographic Transition theory claimed that social and economic changes had caused the fertility decline.

By the end of the interwar period, fertility declined below replacement level in all countries in northwestern and central Europe (Notestein, 1945). This fall of fertility levels near or below replacement levels in various European countries led to the inclusion of a fifth phase (Susel, 2005; Van de Kaa, 2008).

Van de Kaa and Lesthaeghe noticed the occurrence of new demographic changes in Europe during the 1960s. Some characteristics of this Second Demographic Transition were shifts in values and attitudes. These changes comprise the declining age at first sexual intercourse, rising age at first marriage, rising nonmarital fertility, higher parity births become rare (four or more), new types of households (such as premarital single living, cohabitation), rising education levels, greater female economic autonomy, efficient contraception, and fertility postponement (Lesthaeghe, 2014).

The expansion of Europe led to faster declines in mortality and fertility in other regions of the World. Western civilization spread to the rest of the World. Medicine, improved sanitation, increased food distribution, and other developments were transferred to these areas (Davis 1945; Coale 1984). The first areas were the United States, Canada, Australia, and New Zealand, where migrants from northwestern Europe settled. Next, modernization occurred in parts of Latin America, specifically where immigrants from southern and eastern Europe moved. In the twentieth century, particularly since World

War II, modernization took place in parts of Asia, northern Africa, and sub-Saharan Africa (Easterlin, 1985).

The demographic transition also started in most of the countries in other continents. Latin America experienced a rapid demographic change. The region experienced higher population growth rates compared to other parts of the World except Africa in the 1950s and 1960s. In the first half of the twentieth century, mortality began to fall, whereas fertility remained high. Even in several countries, fertility increased between 1950 and 1960 as documented in Guzman (2006) and Quaresma (2019). However, from the early 1960s, fertility began to fall fast in most of the countries in the region, although in a diverse form in part of Latin America (Guzmán, 2006). The author analyzed data for 35 countries of the Region of Latin America and the Caribbean. Guzman (2006) categorized these countries into four regions: 1) Meso America (Mexico and countries of Central America), 2) the Caribbean (Latin and non-Latin countries), 3) Andean countries (Venezuela, Colombia, Peru, Ecuador, and Bolivia), 4) Southern Cone (Argentina, Chile, Uruguay, and Paraguay) together with Brazil.

Guzmán (2006) identified four main models of demographic transition in this region.

The first demographic transition model refers to two countries of the Southern Cone, namely Argentina and Uruguay. Guzman mentioned that these countries started their transition early and had a comparable pattern as that of Europe. The change is advanced. Fertility dropped in the first half of the 20th century. According to Guzmán, European immigration from lower fertility countries and the rapid and early urbanization were the critical factors of this initial fertility decline.

Secondly, are the countries that are in the first or moderate transition. Their fertility transition started later and slower. The author said that these countries began their transition with high fertility levels, and until the 1980s, their population growth stayed stable.

The third group is the largest group of countries consisting of the two largest countries in the region, namely Mexico and Brazil, four of the five Andean countries (Ecuador, Colombia, Peru, and Venezuela), three Mesoamerican countries (Panama, Costa Rica and El Salvador), and two Caribbean countries (the Dominican Republic and Jamaica). These countries had a normal/classic transition.

Lastly, countries in the intermediate transition have a similar transition process as those of group three, but they began their transition with lower rates. This group comprises Chile and Trinidad and Tobago.

Guzmán further stated that the fall in fertility was one of the significant social changes in this region. He mentioned critical features of the fertility transition (Guzmán, 2006, p. 530):

> 1) fertility rates were high at the start of the transition in several countries, 2) there were significant differences between the states because not all countries began at the same level or followed the same pattern, 3) the transition started in the early or mid-1960 in most countries, 4) contraception is the leading cause of the fertility fall, 5) in the 1950s, the higher marriage rate, resulted in the increase in fertility during the pre-transition period but did not have a significant impact on the transition process, 6) this global transformation is related/linked to social and spatial diversity.

Guzmán also distinguished several fertility transitions models in the region (Guzmán, 2006, p.531-533).

Firstly, two Southern Cone countries, Argentina, and Uruguay were the forerunners in the early twentieth century because of social and economic development and European immigration. However, these countries do not have the lowest fertility rates currently (period 2005).

The second and most significant group of countries started their transition in the 1960s and have fertility rates of between 2 and 3 children. This group consisted of Mexico and Brazil, three Mesoamerican countries, the Andean countries apart from Bolivia, and the Dominican Republic in the Caribbean.

The third group comprises three Mesoamerican countries (Guatemala, Honduras, and Nicaragua) together with the least developed countries of the sub-regions (Paraguay for the Southern Cone, Haiti for the Caribbean, and Bolivia for the Andean countries). The total fertility rate is above three children per woman.

The last group is the non-Latin Caribbean countries. The countries in this sub-region are either in the first (Barbados and the Netherlands Antilles) or the second group (all other countries.

Guzmán placed Suriname in the Caribbean sub-region. Between 1950-1954, the mean number of children was 6.56 and declined to 2.45 children per woman during 20002004. Thus, Suriname falls in the fourth group, as stated by Guzmán.

Guzmán used the main determinants to explain the fertility decline in the region: contraception, nuptiality, and induced abortion. Guzmán indicated that contraceptive use is the crucial determinant associated to the fertility decline in Latin America and the Caribbean. The effect of nuptiality on the fall in fertility is insignificant. Regarding induced abortion, data is insufficient to analyze its influence on fertility.

Cabella and Nathan (2018) has made a different classification of the countries in the region of Latin America and the Caribbean compared to Guzmán (2006). Cabella and Nathan distinguished three sub-regions, namely, the Caribbean, Central America, and South America. Suriname is placed in the South American sub-region. According to these authors, the total fertility rate in 2010-2015 was 2.46 for Suriname.

Cabella and Nathan cited Guzmán's statement that increased contraceptive use is the crucial determinant responsible for the fertility decline. The organization mentioned that 18 countries in the sub-continent had reached TFRs below the replacement level in the 2010-2015 period. This fall in fertility to low levels is a result of the persistence of high adolescent reproduction rates, the delay in maternity mostly among educated women, and a rise in the proportion of women without children. Guzmán (2006) also mentioned that adolescent fertility rates were higher in comparison to other regions in the World and that this was not declining as the overall fertility.

Guzmán (2006), and Cabella & Nathan (2018) estimated fertility rates indicate that Suriname maintained a stable fertility level[7] around 2.45-2.46 children per woman since 2000 until, at least the second quinquennial of 2010.

[7] The Population Census data of Suriname indicated a TFR of 2.53-2.56 for 2004 and 2012 Population Census respectively

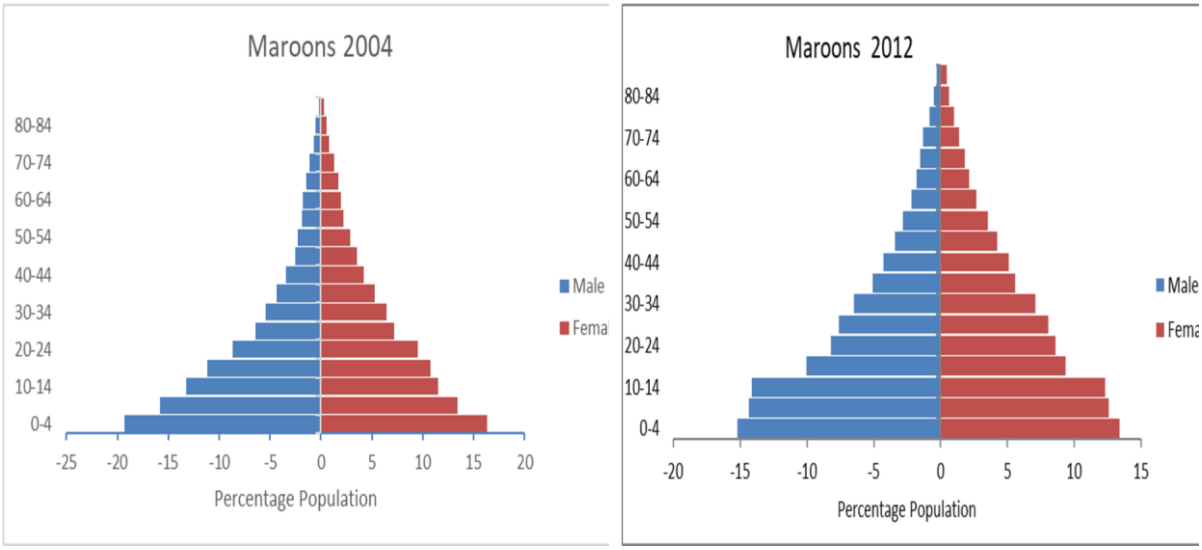
Maroons as one of the ethnic groups with relatively high fertility (see Table 1.5, Table 1.6, Table 1.7, Figure 1.6, and Figure 1.7) have contributed to maintaining the stable national fertility level in this period. Hence, another reason to study this sub-population of Suriname.

The population pyramid describes the demographic phase of the Maroon population (see Figure 1.4).

There is a large group of infants, children, and adolescents. Maroons have high birth rates, and points to a youthful age structure. The increasing number of surviving children and growing population indicate lower infant mortality. Differences in both profiles are probably due to coverage differences in the two censuses. The 2012 age distribution suggests that cohorts aged 15 or less (bottom of the 2012 pyramid) were probably omitted in the previous Census.

In any case, the similar size of each of the three youngest cohorts (Population aged 0–4, 5-9, and 10-14, respectively) in 2012 indicates relatively stable natality rates.

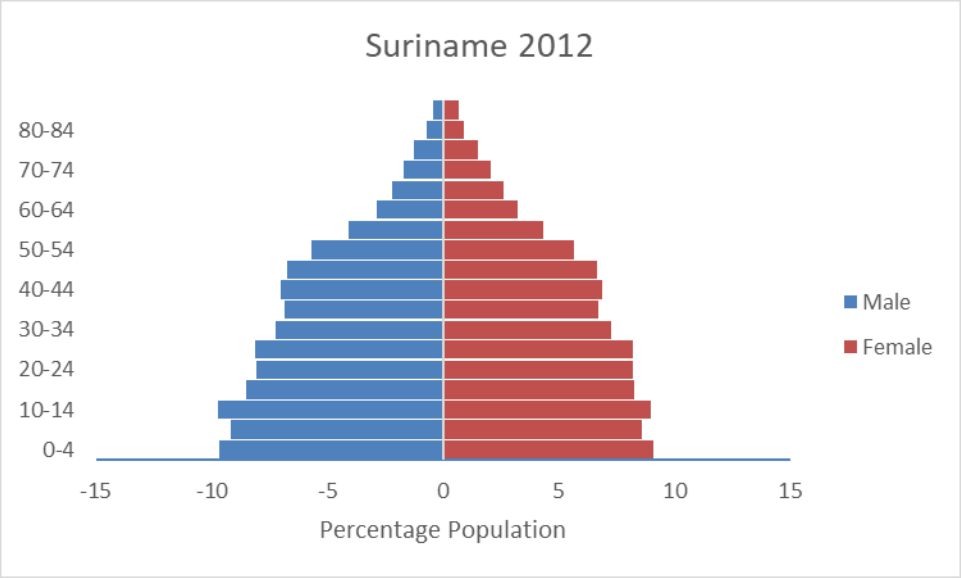
Figure 1. 4 - Relative Age and Sex distribution of the Maroon population in 2004 and 2012



Source: ABS (General Statistics Bureau Suriname), Tabel 6: Bevolking naar etnische groep, leeftijdsgroep en geslacht, p.31) and Resultaten Achtste (8e) Volks- en Woningtelling in Suriname (Volume 1), 2013, p. 46

Additionally, the population structure of Suriname reflects declining birth rate, although having still a moderate group of young population - infants, children, and adolescents. There is also a large proportion of population in the reproductive ages. Furthermore, the country has a growing number of persons living afterwards, suggesting a low mortality rate and recent migration flows. A relatively small population at the highest ages indicates high mortality levels in the past. Hence, population growth is moderate (see Figure 1.5).

Figure 1. 5 - Relative Age and Sex distribution of the Suriname population, Census 2012



Source: ABS (General Statistics Bureau Suriname), Tabel 1: Bevolking naar leeftijd/leeftijdsgroep en geslacht. Resultaten Achtste (8e) Volks- en Woningtelling in Suriname (Volume 1), 2013, p. 40

- High fertility: Maroons have high fertility.

Maroons have the highest number of children ever born and the total fertility rate (TFR) in Suriname (see Table 1.5). Maroons had the highest number of births compared to the other major ethnic groups during the intercensal period (2004-2012). The average number of children ever born, or Parity 45-49, i.e., by the end of the reproductive period is 5.79. The lower value in the TFR, if data are reliable, suggests a probable declining trend since parity or the number of children ever born (CEB) is a stock variable.

Table 1. 5 - Maroon Population (2004) Total Fertility Rate (TFR) and Parity at ages 45-49 by Ethnic group in Suriname, 2004

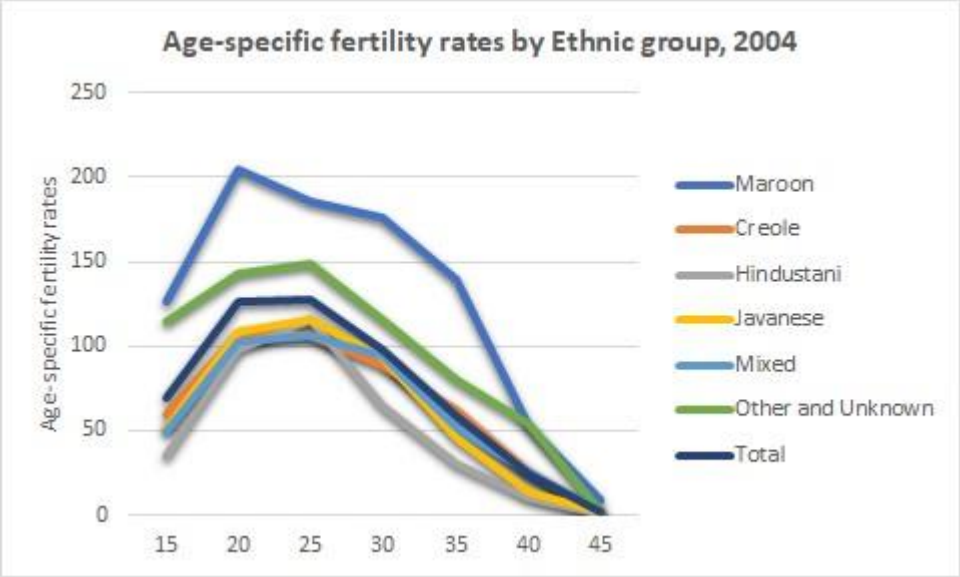
Ethnicity	Total	Percentage	TFR*	CEB**
Maroon	25925	32,9	4.47	5.79
Creole	9716	12,3	2.26	3.06
Hindustani	15194	19,3	1.78	3.15
Javanese	7304	9,3	2.15	3.17
Mixed	15717	19,9	2.12	2.77
Others	4983	6,3	2.93	3.46
Unknown***	294	0,4	3.69	4.91
Total	78839	100	2.53	3.48

Source: Menke, J, and Sno, I, 2016, p.118, in Menke, J (ed.), 2016 and Population Census Suriname, Results Volume 1, p.24

*Total Fertility Rate (TFR)
**Mean number of children ever born by the end of the reproductive period
***Likely that a higher number of cases in the Unknown group are Maroon women

Maroons also have the highest age-specific fertility rates compared to other main ethnic groups in Suriname (see Appendix Table 1.8 and Figure 1.6).

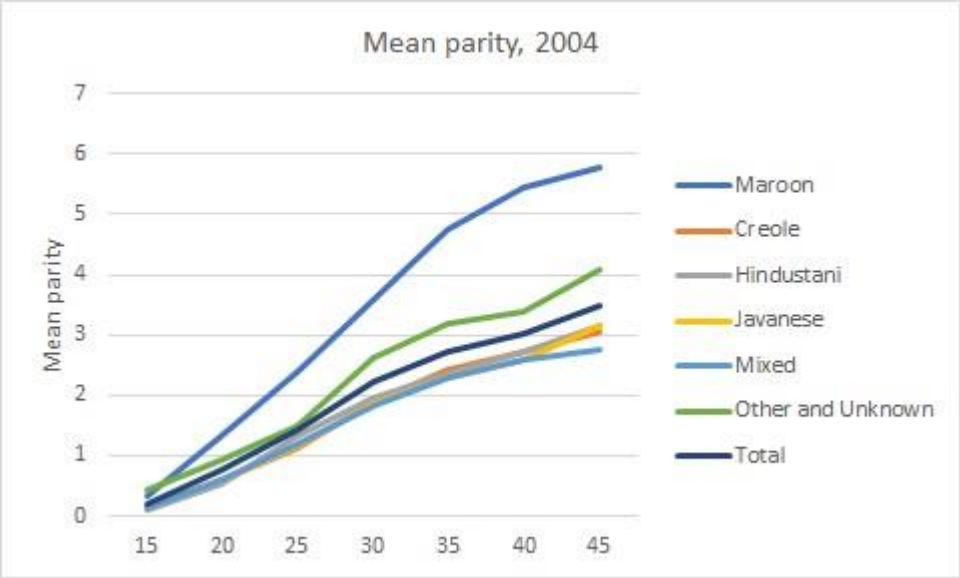
Figure 1. 6 - Age-specific Fertility rate by Ethnic groups in Suriname, 2004



Source: Sno, (2011). Data for ASFR for Ethnic groups in Suriname from Table 2: Leeftijdsspecifieke geboortecijfers en totaal vruchtbaarheidscijfer per etnische groep, p.2

Maroons have the highest mean parity compared to other ethnic groups in the country. A Maroon woman had approximately six children at the end of her reproductive age in 2004 (see Appendix Table 1.9 and Figure 1.7).

Figure 1. 7 - Mean parity by Ethnic groups in Suriname, 2004



Source: Data for Mean parity for Ethnic groups in Suriname (2004) from Table 3: Cumulatieve Fertiliteit per etnische groep, p.3. Sno (2011).

- Cultural particularities

In Suriname, each ethnic group has maintained its traditions, cuisine, traditional costumes, religion, and language. Maroons have a matrilineal kinship structure with aspects of complimentary filiation (Pires, 2015). They desire both male and female offspring. Girls/women are important since they must produce offspring for their lineage. Men/boys are also essential because they expand the family of their wives (S, Price, 1984/1996, p.33 +p.42).

The man is the one who helps to grow the lineage of the woman by giving her the greatest gift, a child. Men need to have sex with their pregnant wife because Maroons believe that semen nourishes the fetus. Maroons think that men who do not help to raise their children are a terrible example. Also, the lineage of the father is involved in the ceremonies of boys and girls when they become adolescents; an example is the

giving of the kamisa (thong) and first shotgun for boys or kojo (apron) or koosu/pangi (skirt) for girls. Furthermore, the father also must teach the son, male skills such as hunting. Maroons also believe that diseases and tjina (food taboos/allergies) are transferred through the father. Both father's and mother's ancestry are essential to declare to which group one belongs (Pires, 2015).

The literature review will discuss further details.

- Scarce research has been done.

Because of scarce or no existence of demographic research in Suriname or in the various ethnic groups, specifically regarding fertility and demographic transition, this research will contribute to update and enhance research.

The findings will furthermore provide baseline data and literature for future research. The study anticipates encouraging future demographic analysis of the other ethnic groups because research is also necessary for these sub-populations with their dynamics. Investigation of different ethnic groups can result in giving a complete picture of the dynamics of reproductive behavior in Suriname. As a result, the responsible stakeholders can initiate more effective and efficient programs and projects. It will, therefore, be useful for population policy and decision making.

The study findings can also improve knowledge and understanding about determinants that could play a role and detect possible changes in explaining the past and current fertility behavior of the Maroons. Furthermore, it will increase awareness about perceptions, traditions, and behavior regarding the reproduction and fertility of the Maroon population. Finally, the study makes a recommendation regarding the adjustment of critical variables (i.e., marriage and religion) in census and surveys resulting in improving data analysis.

The study also expects to encourage regional research regarding the fertility behavior in Latin America and the Caribbean, where there are descendants of Maroon populations. In Latin America, descendants of runaway African slaves, Mocambeiros and Quilombolas (Brazil); Cimarrones and Palenqueros (in, e.g., Colombia), live in communities and have maintained their ancestral culture. In the Caribbean, there are

also Maroon populations in, e.g., Jamaica and other Caribbean islands. Demographic research can be conducted about these Maroon populations who adhere to their ancestral culture after many centuries.

All these research findings help bring about a deeper understanding and enrichment of universal knowledge regarding the demographic transitions. It can help build or improve existing demographic theories and explanations, expanding the knowledge about Latin America, and the Caribbean.

Some demographic research has been conducted among some Maroon tribes. Although the knowledge they provide remains essential, it is necessary to update this and give a new dimension to the existing literature. However, the findings of this study, important to state it, do not generalize the whole Maroon population in Suriname. The purpose, as mentioned, is to provide baseline literature for future studies. There is also no research done regarding demographic changes in Suriname. This study will investigate whether Maroon women residing in the urban region of Suriname are going through a process of fertility transition.

The author of this dissertation has researched this ethnic group in 2002 as the fulfillment of her M.Sc. thesis. This research was done in four villages along the UpperSuriname river in the Sipaliwini district among the Saamaka male and female Maroons (with the assistance of the National Women's Organization through the funding of UNICEF). Both questionnaires/surveys (interviews) and focus group discussions were used to collect data. The author looked at the fertility behavior using the proximate determinants model of Bongaarts.

De Beet and Sterman did ethnographic research during 1972 – 1974 among the Matawai Maroons. These authors collected census data in 17 of the 19 villages of the Matawai about religion, demography, and social organization. They used the intermediate factors as proposed by Davis and Blake to analyze specific social- and cultural factors that determined the Matawai fertility. According to de Beet/Sterman, the total Matawai population was 1570 in 1974. They concluded that high levels of fertility did not cause the increased growth of this population, but by increasing life expectancy resulting from the decline of child mortality.

Hurault (1959) conducted a demographic study between 1957 and 1959 among Aluku (Boni) in French Guyana and on the Suriname coast. He discussed the fertility and mortality of the Aluku tribe.

Sno (2011) wrote about the fertility and growth of Maroons in Suriname. He used Census 2004 data to describe the period and cohort fertility of Maroons in comparison with other groups, period fertility, and the relationship between education and fertility in the three geographic areas (rural, urban, and interior) and a projection for 2024 of the Maroon population.

Looking at data published by Richard Price (2002,2013 & 2018) and Kambel (2006), two tribes, namely the Saamaka and the Ndyuka, are the largest societies. The population size can indicate that these two groups are the ones that mainly have contributed to this population growth in recent decades.

The estimated Maroon population in 2002 was 117,600 and in 2014 was 210,000, (see Table 1.6). The annual growth rate is 4.8% which still is high if considering it is a 12year period. So, this does not differ too much from the Census findings (i.e., 6%). The absolute numbers vary of both the Census and Price, but the annual growth rates do not show a huge difference. Population figures published by Price in 2018, disclosed that the recent total Maroon population in Suriname, French-Guyana, and other parts in the World, must be 263,300.

Price estimated the population size of the Maroon tribes in Suriname from personal observation and information received from other Anthropologists about the numbers of specific Maroon tribes (Price, R, 2002; Price, R, 2013).

Kambel (see Table 1.7) estimated the number of Maroons (61,636) living in villages in 2005 from data received from the Medical Mission that is responsible for the health care of the Indigenous and Maroon populations in the interior of Suriname. The data are based on the number of registered patients at their clinics in Sipaliwini, Brokopondo, and part of Para. Figures are partial because the Medical Mission does not cover all regions were Maroons live (such as Marowijne).

The Census has a question to which tribe Maroons or Indigenous people belong, but the data was never published. This variable can be used, for example, to indicate which tribe is the largest and contributes to produce many births. The Multiple Indicator

Surveys (MICS) do not ask questions about the specific tribes. Respondents need to report to which ethnic groups they belong. The MICS has a question about the language spoken in the household. This variable can be used as a proxy for the tribe.

Table 1. 6 - Estimated numbers of Maroons by Ethnic group in Suriname and the World in 2018

Tribes	Suriname "Interior"	Paramaribo and Environs	Guyane interior	Guyane littoral	Europe, USA, etc.	Total
Ndyuka	19,000	39,000	13,500	33,500	10,500	115,500
Saamaka	35,000	35,000		35,500	10,000	115,500
Aluku	100	400	6,600	3,200	1,300	11,600
Pamaka	1,000	1,100	3,500	3,400	2,000	11,000
Matawai	1,300	6,800			400	8,500
Kwinti	300	750			150	1,200
Total	56,700	83,050	23,600	75,600	24,350	263,300
Total %	21.5	31.5	9.0	28.7	9.2	100.0

Source: R. Price, 2018. Maroons in Guyane. Getting the numbers right. P. 282

Table 1. 7 - Suriname Estimated numbers of Maroons living in villages where the Medical Mission operates by Ethnic group in 2005

Tribe	Total
Saamaka	34,482
Ndyuka/ Okanisi	22,943
Pamaka	2,169
Matawai	1,537
Kwinti	131
Aluku/ Boni	374
Total	61,636

Source: Kambel, 2006, Estimated number of Indigenous peoples and Maroons by Ethnic group, Figure 4 in Indigenous peoples, and Maroons in Suriname. Economic and Sector Studies Series, RE3-06-005, Inter-American Development Bank

This study seeks to address the following research questions and hypotheses.

1.7 Research Questions and Hypotheses

1.7.1 Research questions

1) Is the fertility rate of Maroon women high compared to other ethnic groups in Suriname?

Is this rate falling among the Maroon population? If so, does this indicate that this population is undergoing a fertility transition?

Once the fertility transition is undergoing, one of the mechanisms that help to produce such a change is the use of contraceptive methods.

2) Do young Maroon women have used more contraceptives than previous generations? What is the effect of this on the fertility rate?

If younger Maroon women have used more contraceptives, why does the fertility remain relatively high?

1.7.2 Hypotheses

1.a) If a process of demographic transition, including the fall in fertility rate, is detected among the Maroon women, this process can be explained by factors such as urbanization, an increase of schooling, and salaried work.

1.b) On the other hand, certain factors linked to the fertility transition were already present among Maroon women even before such a process had begun, such as the possibility of divorce, relative independence concerning the husband. Thus, these populations may present trends that are not as expected.

1.c) Compared to other ethnic groups in Suriname, a central factor for maintaining a relatively high fertility rate for female maroons lies in preferences and values, particularly in the importance of many children within a matrilineal system.

2.a) If female Maroons have used more contraceptives, but their fertility rate remains relatively high, the methods used may be ineffective or ineffectively applied.

2.b) Alternatively, contraceptive methods may be used selectively, not to reduce the number of children, but of planning the moment and the partner with whom one wants to have children.

Finally, the structure of the dissertation to reach the answer to the questions and test the hypotheses is as follows.

1.8 Structure of the study

The first chapter presents the introduction and background, the purpose and specific objectives, justification and research questions, hypotheses, and construction of the study.

The second chapter reviews the literature. This chapter presents a detailed summary of the existing research and documentation of fertility determinants and Maroons in Suriname. The methodology of the literature search is described, followed by a concise view of fertility determinant frameworks. Aspects of the Maroon population are discussed in the next section. The themes are about the demographic development of the early Maroon society, the urbanization process, the place of women, marriage/polygyny/divorce, sexual behavior, fertility behavior, contraceptive use, breastfeeding, and other postpartum practices.

Chapter three describes the quantitative and qualitative methods used in this study. In this chapter, the variables in the survey and census databases are mentioned. These variables are explained. The statistical analysis is presented. For qualitative research, the data collection and data analysis procedures are described. Furthermore, ethics,

reliability, researcher's role, and challenges experienced during the qualitative research are considered.

In the fourth chapter are the research findings/result of both the quantitative and qualitative parts of the study. The chapter is organized as follows: First, the sociodemographic analysis of the Maroon respondents in the surveys. Then, fertility analysis of various fertility measures, namely the age-specific and total fertility rates, mean parity. Data about current contraceptive use and breastfeeding was also analyzed.

In the qualitative part, socio-demographic characteristics of the respondents were given and followed by the findings of the various themes. The theme of fertility behavior focuses on the importance of children, child preferences, religious/cultural attitudes, reproductive decision-making, expectations for children of the family and husband, women's reasons for (not) desiring children.

Next, the theme of union formation looked at acceptance, reasons, and conditions for divorce, polygyny, and partner choice.

The theme of contraceptive behavior describes women's views, experience, the reason for (not) using contraceptives, cultural, traditional, and modern contraceptive methods, influence on women's contraceptive use, husband's and family's views, access, and knowledge.

Finally, the theme on postpartum practices addresses the duration and reasons for breastfeeding and postpartum abstinence, the importance of breastfeeding, the views of the family and husband regarding postpartum abstinence, and postpartum rituals.

Chapter five provides a discussion about the explanation and relevance of the research findings and how it relates to the literature review to find answers to the research questions and hypotheses. In addition, implications to the fertility theory are reviewed, namely Easterlin's framework and the fertility transition. Also, the limitations of the study are presented.

Finally, chapter six presents conclusions and recommendations.

Next, a review of the literature presents a summary of the determinants to analyze fertility transitions and existing research of the Maroons in Suriname.

2. LITERATURE REVIEW

2.1 Introduction

The aim of this literature review was:

- To investigate the theoretical frameworks to analyze fertility transitions
- to investigate and review the existing research/literature critically
- To synthesize what is known about the topic as it pertains to the Maroon population of Suriname.

First, this section discusses the frameworks to study fertility change. Then follows the themes in the literature review that focused on the determinants analyzed in the Methodology and Result chapters.

Having in mind the research questions in this study (see Chapter 1, section 1.7), the following will explain how the literature search was done.

2.1.2 Literature search strategy

Each article, thesis or book reviewed, seeking to identify factors that could have an impact and help understand the fertility behavior of the Maroons. The materials were selected according to their relevance to the topic in this study.

The overall subject of this study is the fertility behavior of the Maroon population in Suriname. Thus, we focused on beliefs, traditions, women's status, urbanization, other behavioral factors such as contraceptive use and so.

The data come from various fields such as anthropology, sociology, history, and public health.

Databases and catalogs were searched in the libraries in Suriname. Most of the literature search was done in the library of the Anton de Kom University of Suriname (ADEK). The library of the University in Suriname has theses and an exclusive catalog about Suriname-related documents. Online searching was also conducted.

A search using Capes-Portal de Periodicos <https://www.periodicos.capes.gov.br/> was carried out, and search terms were used like Suriname and Maroons. Some articles were found that were relevant.

An online search in JSTOR and DBNL (Digitale Bibliotheek voor de Nederlandse Letteren) was also conducted, and few articles were found.

Keywords search were done to retrieve relevant information. These keywords included “Maroons”, “Marron”, “Bosneger”, “Bosland creool”, “Suriname” in combination with “fertility”, “fertility behavior”, “contraceptive behavior”, “contraception”, “sexual behavior”, “reproduction”, “cultuur”, and “culture”. Other keywords that were used were the names of the tribes such as “Saramaka”, “Saamaka”, “Matawai”, “Ndyuka”, “Okanisi”, “Aluku”, “Boni”, “Paramaka”, “Pamaka”, “Kwinti”. The information was retrieved and organized by themes. Only data relevant to this study was retrieved. The area of interest was mainly Maroons in Suriname. Some literature has been included from French Guyana because this French literature also contains data about Suriname Maroons.

In the databases of the University in Suriname, the researcher also searched for keywords and phrases mentioned under the articles. The bibliography in the documents was searched to find other relevant titles on the subject. The researcher furthermore looked in the bibliography of these publications to find more related titles. The search was also done based on the names of authors who wrote articles and books about the Maroons.

The co-supervisor also shared some of the articles and books concerning the Maroon population in Suriname.

Few books were bought in a Paramaribo bookstore (VACO) that is known to sell books written about Suriname.

2.1.3 Limitation

On the premises that a literature review never ends, important efforts were done to encompass as much as possible of the existing material. Surely, some gaps are inevitable.

Literature in other languages that the researcher is not familiar with unfortunately could not be included.

Reference to citations in secondary sources is made only when the original source could not be found.

Most Anthropology books used in this dissertation were written decades ago. Nevertheless, the data may still be useful to understand if changes relevant to the topic of study can be spotted.

2.1.4 Organization of the review

The review focused on the literature that is significant for understanding fertility transformations. The theoretical framework for analyzing fertility transition will be discussed. The main sections of the review about the Maroons concentrate on determinants that could influence the fertility behavior of the Maroon population in Suriname.

The focus is mainly on the following factors/themes: marriage forms; traditions; sexual behavior; the value of children; postpartum practices; and contraceptive. These are all factors that influence fertility behavior precisely once certain conditions are given (this aspect is discussed in chapter 2.3). Furthermore, a demographic context is given of how the Maroon society came into existence in Suriname. The role and impact of urbanization in general on Maroons' life and on female Maroons are also discussed.

These themes are extracted from articles, books, theses, and journal articles. Most of them are written as a section or paragraph in the publication, showing that not the entire paper is dedicated to these topics. Also, the central themes of those texts are not necessarily linked to the fertility behavior of the Maroons. Although part of the publications and documents are also outdated, the information is still useful because it helps to see possible changes that might have occurred. This study further measures

the fertility rates and will use the data of the qualitative research to clarify the fertility change. There is a shortage of demographic or fertility research in Suriname, specifically the fertility of the Maroons. To the researcher's knowledge, there is no study using qualitative data to explain fertility change. The researcher could not find studies focused on fertility change or demographic change in Suriname and of other ethnic groups.

2.2 Theoretical frameworks for analyzing fertility transitions

2.2.1 Theoretical frameworks

This section presents the theoretical frameworks used to analyze fertility transitions[8].

Fertility behavior is subject to the decision making of people, but they cannot determine the desired reproductive outcomes directly. However, people can influence fertility by managing one or more intermediate determinants. These factors are either purely biological - permanent sterility and intra-uterine mortality - or biological and behavioral -marriage, contraceptive use, sexual intercourse, breastfeeding, and abortion (Davis &Blake, 1956; Bongaarts, 1978; De Bruijn, 1999). Some authors (Davis &Blake, 1956; Bongaarts, 1978; Easterlin, 1983) have focused on the intermediate determinants that directly affect fertility. Davis and Blake (1956) developed a set of intermediate determinants to analyze fertility. Bongaarts (1978) has further refined the framework that was proposed by Davis and Blake. Easterlin (1983), in turn, continued with these frameworks and added core variables to analyze the impact of modernization on fertility.

However, Coale (1984) mentioned three preconditions for fertility decline in 1973. The intentional decision to have a certain number of children must be socially and morally acceptable. People should understand that limiting the number of children has advantages. Thus, they must be willing to regulate their fertility to limit their family size. To practice fertility control, effective methods of fertility reduction must be available. Coale further stated that these three prerequisites would be predominant in a less

[8] Easterlin (1983) defined fertility transition as the combined process of fertility decline and the shift to deliberate fertility control.

developed country when the country is modernized. On the other hand, some cultures and traditions are more resistant than others for these preconditions to develop (Coale, 1984, p. 548). Easterlin (1983) mentioned modernization determinants such as urbanization, education, and family planning programs that can encourage people to have smaller families and, therefore, will stimulate them to accept fertility regulation practices.

People can use several means to regulate their fertility. Contraceptive practice is one of them.

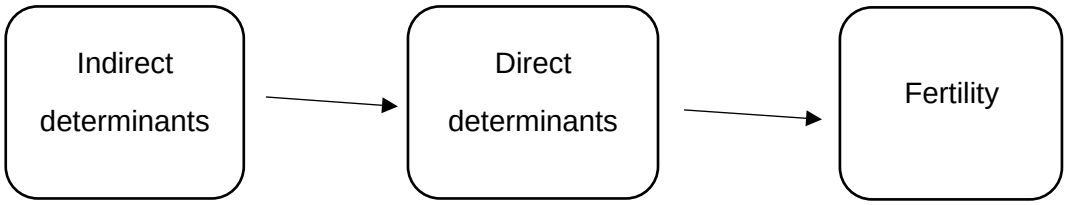
Some authors (Davis & Blake, 1956; Bongaarts, 1978; Easterlin, 1983) have cited contraception as one of the fertility control determinants that directly affect fertility.

This section discusses these theoretical frameworks used for the analysis of fertility change.

Davis and Blake (1956) described how this framework of intermediate variables affects the level of fertility. The conjunct of intermediate variables are related to intercourse, conception, and gestation. According to these authors, only through these direct variables can other variables such as cultural conditions, affect fertility. They stated that all these variables are present in every society.

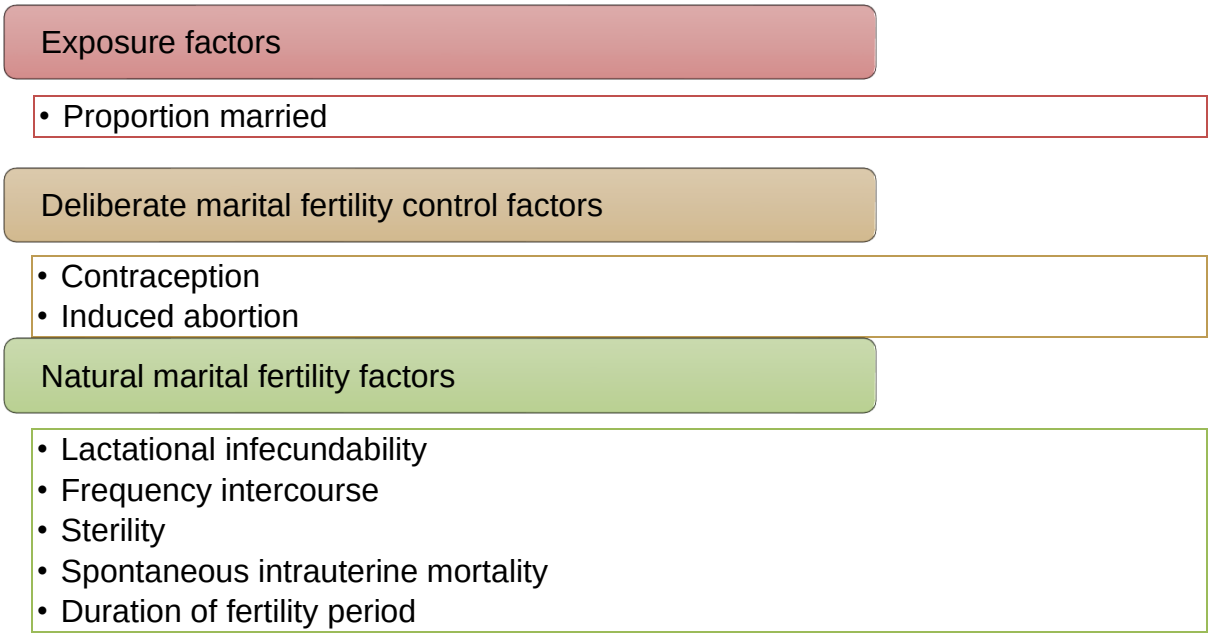
Bongaarts (1978), then, categorized these determinants further into three broad categories, namely, exposure factors, deliberate marital fertility control factors, and natural marital fertility factors. He also stated that these direct determinants or intermediate fertility variables influence the fertility directly. The indirect determinants are the socioeconomic, cultural, and environmental variables that affect fertility indirectly through the direct/intermediate variables.

Figure 2. 1 - Proximate Determinants Frame Bongaarts



Source: Bongaarts, 1978, p.106

Figure 2. 2 - Intermediate/Direct Determinants Bongaarts



Source: Bongaarts, 1978, p.106

An explanation based in Bongaarts (1978) is given of these direct factors.

The proportion married is the proportion of women of reproductive age in stable sexual unions, namely marriage and consensual unions. These unions are referred to as "marriage[9]" for convenience. Bongaarts (2015, p.539-540) modified this factor to include unmarried women who are pregnant, report sex in the last months, use contraceptive or

[9] Davis & Blake (1956) preferred the term sexual union

are postpartum infecund. Thus, the proportion of married consists of all women who are engaged in sexual exposure.

Contraception refers to any deliberate practice to reduce conception, and it is one of the responsible factors for inhibiting the fertility level. The contraceptive practice is mainly responsible for the variation in marital fertility.

Induced abortion is a deliberate practice to interrupt a gestation. Evidence has shown that the practice of induced abortion is difficult to indicate the reduction in fertility.

The duration and intensity of lactation influence lactation infecundability. Countries at different development levels experience differences in lactation practices. Many women do not lactate in modern western societies, and lactation is usually short. In contrast, it is longer and may last until the next pregnancy in traditional populations in Latin America, Asia, and Africa. Lactation lengthens the birth interval and decreases natural fertility.

The frequency of intercourse can be affected by temporary separation and illness. But coital frequency is not a significant factor in fertility variation among populations, although it affects the total fecundity rate.

Sterility can occur before menarche, at the beginning of the menstrual function, after menopause, or even before reaching menopause.

Spontaneous intrauterine mortality refers to stillbirth.

The duration of the fecundability period is the short period in the middle of the menstrual cycle when the woman can conceive.

Sterility, spontaneous intrauterine mortality, and fecundability period duration are physiological factors that are not under the individuals' control. Two other factors also influence fertility, namely genetic and environmental. The effect of genetic factors is not well-known. However, two environmental factors, health, and nutrition seem to have an insignificant impact on fertility. Bongaarts mentioned that these three factors are approximately constant in any population group and not crucial in explaining the fertility differences unless venereal disease exists.

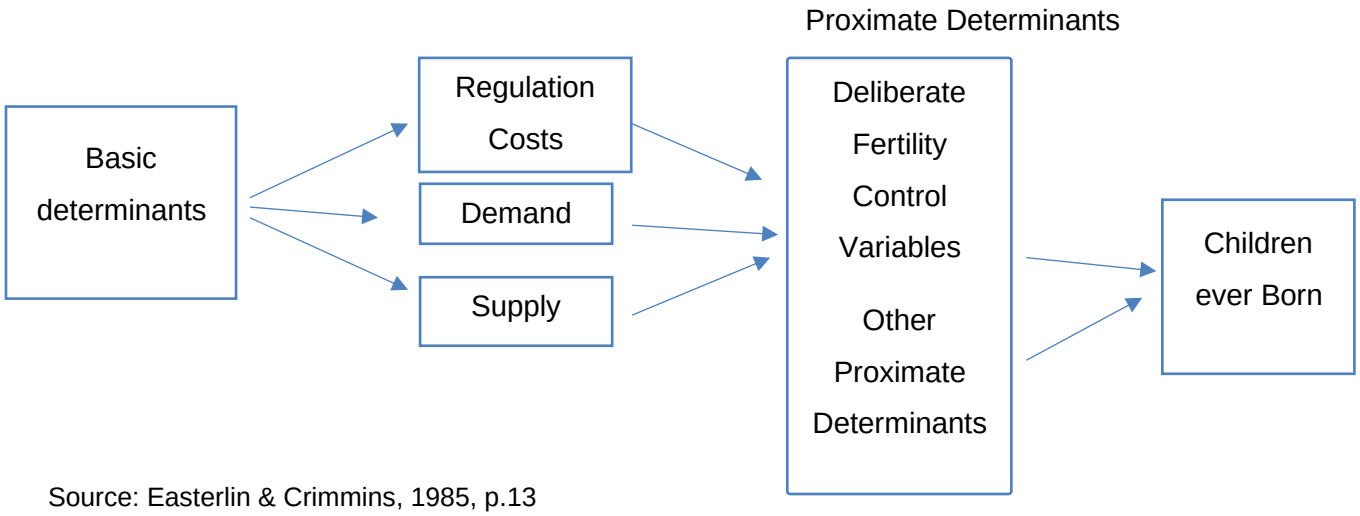
Boongaarts (1978) stated that when direct variables change, fertility also changes. In contrast, when indirect variables change, fertility does not necessarily need to change.

Variations in one or more intermediate fertility variables, according to Bongaarts, indicate the differences and trends in fertility among populations.

Easterlin (1983; Easterlin & Crimmins, 1985) developed another theoretical framework that is a continuation of the proximate determinant framework. It links the processes of modernization and fertility transition. Easterlin (1983, p.565) added another set of what he called “intervening variables” or “core variables”- supply, demand, and regulation costs. Modernization variables directly impact these. The auhtor sets apart the deliberate fertility control variables from the whole set of proximate determinants and focused his model on this subset of proximate determinants- shifts in conscious control would lead to the onset of fertility decrease. Easterlin described factors that explain how the number of surviving children of a couple can decrease if fertility control was available. This explanation can give an understanding of how couples can be motivated to limit their family size.

Thus, Easterlin’s framework indicates that modernization variables impact the intervening variables. The intervening variables, in turn, affect deliberate fertility control and fertility.

Figure 2. 3 - Easterlin Framework relationship modernization and fertility



Source: Easterlin & Crimmins, 1985, p.13

The basic determinants consist of modernization variables, cultural factors, and other determinants. Easterlin (1983) focused on a set of modernization features such as

advances in public health, education, urbanization, introduction of new goods, family planning programs, and described factors that increases the supply or reduce the demand for children inspired on Coale`s original three conditions. The supply of children is the number of surviving children parents would have if they do not deliberately practice fertility control. Biological constraints and cultural conditions may influence the number of children that might be below the natural maximum. The demand for children is the desired family size parents want to have if the regulation of fertility did not cost anything. According to Easterlin, supply and the demand for children determine the motivation to regulate fertility. If the quantity is lower than the need, there is no need to control fertility. However, if the supply surpasses the demand, couples would be motivated to limit the number of children. Also, the costs of fertility regulation rely on the attitudes toward and access to fertility control methods and supplies. The lower the fertility regulation costs, the higher the acceptance of deliberate fertility control.

Easterlin mentioned some factors that reduce the demand for children. Improved public health and medical care can result in a healthier population that is more productive so that per capita income increases. In turn, similar to Becker (1960) an increased per capita income may affect demand and potential supply. Education also gives information about various fertility control methods. Thus, lowering the costs of fertility regulation. Education can also influence cultural norms so that fertility control means are accepted, and it may reduce the demand for children because of the alteration in the desire for children. Furthermore, the relative cost of children can rise through compulsory education because of the decline in the contribution of child labor to the income of the family. The demand for children decreases since the emphasis is placed on the quality of children instead of the quantity.

Urbanization, on the other hand, encourages anti-natal lifestyles. It decreases the demand for children and raises the relative costs of children of a certain quality. Also, urbanization may lower fertility regulation costs because access to fertility control knowledge is better and traditional beliefs are affected, leading to acceptance.

Some goods of modernization are methods of fertility control. These methods decrease fertility regulation costs. Other new products also may give pleasure and request a new lifestyle that replaces children who are old goods.

Family planning programs offer services at a lower price, thus affecting regulation costs. Some family planning programs may also encourage small families and social acceptance, therefore reducing the demand for children and motivate the limitation of fertility and the adoption of fertility control means.

According to Easterlin, some factors increase the supply for children; improvements in public health and medical care may lead to, for instance, the rise in infants' survival and hence increase the potential amount for children. Also, formal education provides knowledge that improves health conditions. It can even weaken cultural practices such as postpartum abstinence and prolonged lactation. Thus, increasing infant survival and natural fertility may improve potential supply. The reduction of lactation practices under urbanization pressure can also affect potential supply.

This study will analyze some determinants of the proximate determinants, adapting the Easterlin's framework to the Maroon's fertility behavior. The quantitative part of this study will measure fertility estimates of the Maroon population. It will focus on factors regarding urbanization, education, reproductive behavior such as union formation, and contraceptive behavior.

2.2.2 The impact of the early phase of modernization on fertility

Easterlin (1985) stated that in the initial period of modernization, fertility might rise. For instance, natural fertility may increase when lactation practices diminish. Couples may not likely adopt deliberate fertility regulation because regulation costs are high, and motivation to limit family size is low. He also remarked that the demand for children equals the number of surviving children when modernization progresses, and motivation increases, and regulation costs decrease.

Correspondingly, some authors stated that sustained fertility decline might occur before an increase in fertility in historical and contemporary populations (Nag et al, 1980; Dyson & Murphy, 1985; Spoorenberg, 2017). According to these authors, development does not result directly in fertility decline. There is a phase of increase

before the occurrence of a sustained fertility decline. Thus, development affects fertility positively and negatively.

The study of Nag et al (1980) reviewed pieces of evidence in demographic literature concerning modernization and their effects on fertility. The authors looked at variables like breastfeeding; nutrition; miscarriage and stillbirth; sterility; voluntary and involuntary abstinence; marital statuses; age at marriage; and proportion never married. This dissertation will focus on a few proximate determinants that are relevant based on the hypotheses formulated: marriage; breastfeeding; postpartum abstinence; and fertility control methods.

Nag et al mentioned that modernization usually leads to a decline in the demand for children. The author also indicated that modernization led to the reduction of postpartum practices and polygyny. Regarding breastfeeding, he noted that significant declines in breastfeeding in most developed countries began in the 20th century when the practice of fertility control methods became common. Therefore, the fertility increase did not occur in these countries. On the other hand, many women in developing countries did not practice birth control when they stopped the practice of breastfeeding. Birth intervals were shortened, because of the decline or discontinuation in the length of breastfeeding. In these countries, fertility increased. He also said that data of a few African countries showed that prolonged breastfeeding is linked to longer birth intervals.

Nag et al further noted the decrease in the duration of breastfeeding might also result in the decline in postpartum abstinence and consequently increase fertility. The author mentioned that when the period of the postpartum abstinence is more extended than breastfeeding, it will influence fertility. Education and urbanization are the essential factors that impact the duration of postpartum abstinence.

Furthermore, the decrease in the practice of polygyny also seemed to have an impact on the duration of postpartum abstinence, especially in African countries. Conversion to Christianity and changes of values associated with modernization have resulted in the reduction of the practice of polygyny. Thus, leading to a decrease in the practice of postpartum abstinence and, consequently, increase fertility.

Thomas Spoorenberg (2017) looked at fertility transitions in five countries of Central Asia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The author linked urbanization, improved health, and economic development to these fertility levels and trends. In the early decades of the twentieth century, these societies experienced developments in various areas: industrialization, improvements in health conditions, education, living standards, and secularization of the indigenous populations. These changes had an impact on the onset of the fertility transition. Spoorenberg, using a variety of data sources, observed a fertility rise before the decline. He examined a set of proximate determinants to analyze this fertility increase: changes in marriage patterns, fecundity and sterility, breastfeeding, birth intervals and policy measures.

The author pointed to the rise of fertility that began during the 1940s, followed by a plateau in the late 1950s. A prolonged decline started by the mid-1970s. By the twenty-first century, fertility started to level off or increase in Central Asia. All countries experienced a pre-decline fertility rise between 1940 and 1970 before the fertility declined. The results show differences between trends and levels in fertility. Spoorenberg indicated that during the 1940s to1960s, marriage was being postponed, and the proportion of women getting married reduced. Female enrolment in education and increased participation in the labor force postponed marriage. The countries then experienced an increase during the 1960s. The author stated that fertility increased during the 1940s and 1950s while marriages were postponed, and small numbers of women got married. Spoorenberg said that this could not explain the rise in fertility.

About fecundity and sterility, Spoorenberg pointed to the high percentages of women affected by sexually transmitted infections. Still, with the increased availability of medicine and investment in public health, the prevalence of sexually transmitted diseases may have reduced in this region. As a result, the proportion of women having children may have increased. The author thereby used the percentage of childless women as an indicator to see whether the fertility increase could be associated with a decline in infertility. Findings showed that the percentage of childless women had declined in all the countries in this region. He concluded that the fertility rise could be explained by the increase in women's fecundity since the proportion of married women did not increase during that period.

Breastfeeding was widely practiced among the indigenous population in Central Asia. Part of the urban fertility increase, according to Spoorenberg, is because of the migration of women with higher birth rates from rural areas to urban areas. Thus, it is difficult to conclude that urbanization had an impact on the breastfeeding practices of women. The author also mentioned that the fertility increase was more significant in rural than in urban areas. Women living in rural areas experienced developments in agriculture, housing, health, and living conditions.

Finally, according to Spoorenberg, pronatalist policy measures such as the prohibition of abortion and financial support to families with children could have played a (albeit limited) role in the rise in fertility. Despite the constraint on abortion, the number of registered abortions increased. Social and economic development influenced fertility in these Central Asian societies in two phases. Firstly, women were not able to adapt their reproductive behavior immediately. Secondly, in a later stage, these developments encourage the adoption and spread of fertility control methods that could result in the reduction of fertility.

The above showed that various regions and countries had experienced a fertility increase in the initial modernization process. The factors that have contributed to this rise varied between countries and regions. Each author (Nag et al, 1980; Spoorenberg, 2017) mentioned declines in postpartum and breastfeeding practices. Nag et al indicated the practice of polygyny declined because of Christianity and modernization. Spoorenberg also talked about improved public health care, an increase in female education and labor force participation, and the prohibition of abortion.

Many Maroons in Suriname migrated to the urban region since the 1960s (Green, 1974; De Beet & Sterman, 1981; De Groot, 1983; Van Stripriaan, 2009). Despite being in an urban setting for decades, Maroons still maintain certain reproductive rituals and have a fertility level above the replacement fertility level. Hence, the studies of Nag et al (1980), and Spoorenberg (2017) can help to understand this process of the fertility transition of Maroon women living in the urban region.

The following section will show some factors that shaped Maroon fertility some decades ago.

2.2.3 Suriname Context- Application of Davis & Blake's and Bongaarts' framework

A few studies have applied the theoretical frameworks of the intermediate determinants to analyze the fertility behavior of the Maroons in Suriname. De Beet & Sterman (1981) used the Davis & Blake's intermediate factors to study the social and cultural factors that affect Matawai fertility. Adams (2003) studied another Maroon society, namely the Saamaka, and applied the Bongaarts framework in four of their villages.

The fertility of the Matawai society

De Beet and Sterman (1981) used the intermediate determinants by Davis and Blake (1956) to analyze the Matawai fertility. The authors also pointed to some differences among the Matawai society. The authors did fieldwork from 1972 to 1974 in the 17 villages of the Matawai and sustained that social and cultural factors affected the Matawai society during this period. They stated that the rise in population growth in the Matawai population registered around 1974 was not caused by high fertility levels but by increasing life expectancies that was partly contributed by the decline in child mortality.

Age at marriage

Regarding the age of marriage, De Beet and Sterman used the age of the first child as a reference point to estimate the age at marriage and found that the women most likely were 16 and 17 years of age at their first union because most of them had their first child at the age of 17 and 18.

Intercourse exposure

Risk of intercourse and, therefore, of being pregnant and produce a live birth is related to at least two dimensions related to marital statuses: permanent celibacy and breaking a union due to divorce or death of the partner.

Concerning permanent celibacy, de Beet and Sterman stated that the number of women older than 20 years who have never been married is minimal. According to them, Matawai do not choose to be permanent celibate because of the economic dependency on each other. This economic dependency is related to the division of labor.

The amount of reproductive period spent after or between unions broken by divorce, separation, or desertion, showed that a significant number of young women were temporarily unmarried after divorce. De Beet and Sterman reported that 21 out of 77 (i.e., 27%) women who were born after 1940 were divorced. The authors also pointed out the surplus of unmarried women because of the skewed sex ratio. This skewed sex ratio was due to a large extent to the migration of the Matawai population that started in the late 1950s. They also mentioned differences in two neighboring clusters in the Matawai region: the Boslanti area and the Posugunu area. In the Boslanti area, the number of women older than age 20 living without a partner varied between 10 and 20 percent. But a high number of women stayed with their first partner throughout their reproductive life. However, in the Posugunu area, divorce was more common. More than 50 percent of women had by the end of their reproductive period, another partner or other partners. In Boslanti, this was 20 percent. De Beet and Sterman revealed that there were no consequences for the time loss within the reproductive period because women had another partner quickly after the divorce. The explanation that the authors gave for the stable marriages in Boslanti was the strong influence of the church.

Finally, De Beet and Sterman indicated that only around an eight of marriages (i.e., 12%) ended with the death of the husband before the woman had reached the end of her childbearing life. They mentioned that the partner must observe a mourning period of three months before a widow can recommence sexual activity. But first, a ritual is carried out to break the ties with the deceased; often, after a year, the widow remarries.

Factors governing the exposure to intercourse

Concerning the factors governing the exposure to intercourse within unions, de Beet and Sterman did not collect data on the frequency of sexual intercourse.

Factors affecting exposure to conception

About factors affecting exposure to conception, De Beet and Sterman found a low fertility considering that the society in observation did not use contraceptives. Matawai women of 1911-1920 had, on average, three children, whereas the cumulative fertility was 4.35 in later cohorts. According to de Beet and Sterman, a significant number of women were childless, despite the high marital rates. The authors explained that the occurrence of venereal diseases was the principal factor. Venereal diseases spread during 1920, the 1930s, and after 1950.

Factors affecting gestation and live births

De Beet and Sterman did not collect data on abortion but indicated that abortion rarely occured. They heard of only one case where a tribal council punished a woman because of suspected abortion. Matawai people, according to the authors, are aware of abortifacients. Twenty-four percent of foetal mortality, i.e., miscarriages, was reported of all conceptions. This high prevalence, uncommon in most populations would indicate the presence of induced abortion.

Fertility behavior in four Saamaka villages

Adams (2003) researched four Saamaka villages in 2002, Masiakiiki, Malobi, Futunaakaba, and Pokigoon (respectively, two non-Christian, a Pentecostal, and a Moravian village[10]). The author used a mixed method. Interviews were conducted through questionnaires among males (47) and females (142). Further, six focus group discussions were held among female leaders and young women (aged 18-24) and two focus group discussions among men (aged 18-35). Adams used the proximate determinant framework of Bongaarts to analyze the fertility behavior of the studied population. The research indicated that there are differences within the Saamaka society in the same area. The findings of the female respondents follow below.

[10] See below for more on Maroon Christianity.

a) Exposure factors:

Proportion married and age at first marriage

In all villages, most females were traditionally married. The mean age at first marriage varied between 15 and 18 years. Overall, most women married before age 19 (61%). However, in Malobi over 32% married between 12 and 14 years of age.

Age of entry into sexual activity

Generally, 90% of female respondents ever had sex in all villages. About 64% of female respondents had their first sexual experience before the age of 15. Mean age differed: Malobi 12.7 years, Masiakriki 13.3 years, Futunaakaba, and Pokigoon 15.4 years each. A possible explanation could be that most women in Futunaakaba and Pokigoon had a higher level of education and were Christians.

b) Number of children ever born

The total number of children varied from 1 to 11. Of all female respondents, 38% had 1 to 3 children. Close to 37% had no children. The mean number of children born ranged between 1.7 and 3.3. Almost 70% of women age 40-49 had four or more children. On the other hand, close to 15% of women in their late twenties had between 4 and 6 children. Almost 21% of female respondents with no education and almost 32% with primary education had between 4 and 6 children. In general, close to 46% had a child before age 20.

In group discussions, women talked about why children are essential in their society. Girls make the family larger and help with domestic chores. Boys expand the family of the wife. The lineage is considered poor when it consists of a few people. And, therefore, it is seen as a disgrace for the family when your sons and daughters cannot beget children. People may call a woman a murderer if she uses the pill. Boys take financial care of their mothers and help to clear the horticultural plot. When they become men, they will lead and be needed for big events. Men also have authority over sisters' children. All children are expected to help their parents when they are older.

The reason why women wanted children

Main reasons given were: children would take care of them in old age (27%-41%); children would help them in time of need/illness (7%-29%); want another child (15%23%). Other reasons included: expand the lineage; the company of the child; children for the ‘new’ man in their life; a child should not be alone but should have siblings.

Reasons for not wanting children

The percentage was exceedingly small. Reasons for not wanting children were: menopause; feeling physically weak; old age; high cost of living.

c) Deliberate marital fertility control factors:

Contraception

Concerning the contraceptive behavior of the female respondents, the current use of contraceptives was extremely low in all villages. Overall, less than 6% of respondents used a contraceptive.

Reasons which respondents mentioned for not using a contraceptive: wanted more children; lack of knowledge; sexually not active; still breastfeeding; fear of side effects; and menopause. In the focus group discussions, females said that contraceptives contradict the will of God. Some also stated that the condom is good for the prevention of HIV and STIs but also prevents pregnancy. Also, some women who wanted to have children would, therefore, not use any contraceptive method. A few said that the husband would not allow the use of a condom. Others mentioned that when you cannot take care of children, then you can use a contraception.

Abortion

Data on abortion was not collected. In focus group discussions, women gave their opinion about abortion. Most opposed it. Focus group participants also claimed that only “evil people” remove a pregnancy. They advised the use of contraception instead

of an abortion. Although they were against abortion, they gave a few reasons when abortion is tolerated. Among the ones mentioned in group discussions were: when the medical doctor advised; for girls who still go to school; or in special cases such as rape.

d) Natural marital fertility factors:

Postpartum practices

Concerning breastfeeding practices, the mean length of breastfeeding ranged from 12.7 months to 16.5 months. Generally, 76% breastfed their infants between 12 and 17 months. Reasons for breastfeeding were having a healthy child and avoid undernourishment. Overall, 67% said that they could stop breastfeeding when the child was physically strong, meaning the child could walk, could eat other food, had teeth, was less dependent on the mother.

Regarding the period of sexual abstinence, the female respondents indicated that they should abstain for three months after birth from sexual activity. The average period of abstinence varied from 9 weeks to 20 weeks. Pokigoon (19.6 weeks) reported the longest period, while Futunaakaba (9.3 weeks) had the shortest period. Almost 23% of female respondents, however, started with sexual intercourse before the customary 12 weeks.

Frequency of sexual intercourse

Sexual intercourse in the last 30 days was used as a measure for the frequency of intercourse. Overall, 53 percent did not have sexual intercourse in the last 30 days before the survey.

What can be concluded from De Beet & Sterman's and Adams' findings is that in both Maroon societies, the age at marriage occurs in the late adolescent years.

As previously stated, De Beet and Sterman mentioned that Matawai women of 19111920 had, on average, three children, whereas the cumulative fertility was 4.35 in later cohorts. Another author, Hurault (1959), mentioned about the decline in fertility among the Boni. He indicated that this society does not practice any methods to

prevent pregnancies. Hurault mentioned that their cumulative fertility was 7.30 from 1850-1895, fell to 3.83 from 1896-1925, and rose again to 4.52 during 1926–1938. As seen, de Beet & Sterman stated that the fertility level is too low for a society were contraception is not practiced and pointed out a high number of childless women due to the high prevalence of venereal diseases. Hurault before them also went in the same direction and claimed that STIs caused both Boni men and women to be infertile or sterile. He called attention to the spread of venereal diseases in 1920 and believed the drop in fertility was the result of it.

On the other hand, Adams (2003) indicated that the average number of children in the four villages she studied ranged from 1.7 to 3.3. Adams also mentioned that by the end of their reproductive age, 70 percent of the Saamaka female respondents had four or more children. Thus, the above shows not much difference regarding fertility in studies spanning many decades and covering different Maroon groups. It also shows that epidemiological factors may have impacted fertility levels more than the use of contraceptive methods, for example.

Apparently, some Maroon societies have experienced fertility change sooner than other Maroon societies due to epidemiological factors. Nowhere is there evidence that the spread of the venereal disease had ever been investigated as a cause of the fertility decline in the above-mentioned societies.

De Beet & Sterman (also Hurault, 1956 for Boni society) mentioned that the Matawai society is not accustomed to practice contraception, consistent with Adams that found a small percentage (6%) of Saamaka women practicing contraception. Most likely, the period between the two studies (1974 and 2002) has brought some changes in contraceptive attitudes and behavior.

Both studies did not collect data on the incidence of abortion. We have seen that De Beet & Sterman said that abortion is rarely practiced, and that in Adams' focus group discussions, respondents mainly opposed such practice. The participants opposed the practice of abortion; however, a few have indicated that only in specific circumstances, one may abort.

Adams showed that, in general, 53 percent of female respondents were not sexually active in the last 30 days. During the research period, many men were absent in the

villages. This might partly explain why half of the respondents did not have sexual intercourse in that period.

The study of de Beet & Sterman reported on the social and cultural changes in the Matawai population. On the other hand, the study of Adams focused on the factors to understand the fertility behavior of the Saamaka population in four villages, and although they did not focus on the fertility transition of the Maroon population, they found changes and differences among and within Maroon societies.

The current research this dissertation carried out will indicate if this population is in the process of a fertility transition. The study will focus on factors to understand fertility change in urban Maroon women in Suriname.

The next section of the literature review, therefore, will focus mainly on the urbanization process, contraceptive behavior, social and cultural institutions in Maroon societies.

2.3 Maroons in Suriname

2.3.1 Demographic context of Maroon societies in Suriname

The demographic development of the Maroon society in Suriname (and, more generally, of Suriname as a country) is different from that of Europe.

There is not much information about the early demographic development of the different Maroon tribes. Maroons created their communities, starting with small groups, and have grown into six societies. The Maroons have a deep oral tradition dealing with their history (R. Price, 2002/1983), but the available published information, whether based on oral histories and archive data give little insight in demographic matters.

This section is an approximate description of the demographic development of the group. It was not the author's intention to write a section about the demographic evolution. During the writing process the idea came to write about it because the group has developed its societies.

The following discusses the origin, composition, and other demographic aspects that have occurred based on the few available sources. The intention here is to reflect about the fact that the early Maroons had developed their societies in different circumstances from what they knew, and a new environment. They came from different parts of Africa, had different cultural backgrounds, languages, and religions, etc. Despite all these differences, they have formed a society with a coherent political and social organization. With bits of information from different sources, the researcher attempts to give an idea of how they started. However, further research is necessary to reflect their demographic evolution better.

Suriname was a plantation colony since 1650 (De Groot, 1975, 1983; Green, 1974). Additionally, Hoogbergen and De Theye (1986), using archives and literature, mentioned that during the 17th century until the 19th century, African people from different parts of West Africa were brought to Suriname as slaves. Most of these slaves were adults between the ages of 15 and 35. Children were hardly ever shipped to Suriname.

2.3.1.1 Marronage

Some literature indicated that slaves and newly arrived Africans escaped from the beginning of the slave period and continued until the end of slavery.

The slave period lasted two centuries from 1650 to 1863, when the abolition of slavery occurred in Suriname (Lamur, 1995). De Groot (1983) stated that marronage [11] probably arose from the very beginning of the slave system in Suriname, which originated with the first English colonization in 1650. Similarly, Hoogbergen and de Theye (1986) said that marronage occurred throughout the entire slavery period. It is clarified by R. Price (1973) and Bilby (1990), who mentioned that the formation of new societies in the interior forest of Suriname came out of the process of marronage. However, not all Maroon communities came to exist at the same time. Hoogbergen (1992/2015) mentioned that most of Boni's ancestors arrived in Suriname after 1752,

[11] Marronage means running away from or fleeing a plantation (Hoogbergen, 1992/2015, p.355)

while the Okanisi/Ndyuka and Saamaka were well established at that time (de Groot, 1983; R. Price, 1983).

2.3.1.2 Origin/development of Maroon societies

Some studies give some insight into the early existence of these societies.

De Groot (1983, 1984) mentioned that after the peace with the Saamaka and Okanisi/Ndyuka agreements in the 1760s, the different Maroon groups were able to build stable communities. These communities were settled near the rivers and consisted of various matrilineal clans. They were also self-sufficient by cultivating horticultural plots, hunting, fishing, building their huts, canoes, and so on. However, they have always relied upon certain products from the coastal society, i.e., from the plantations and city. The religion that they practiced had an African background. De Groot (1969) also said that the clans' organization were according to the plantations from where the runaways came. The author noted that the tribes consist of several clans (called "lo" in their language). Fugitives of the same plantation formed a clan. The clans derived their names from the names of the plantations or plantation owners. In another article, de Groot (1983), based on oral history, archives, and numerous publications, stated that originally Maroon groups were patrilineal and matrilineal. However, the matrilineal structure prevailed.

Furthermore, Helman (1977) indicated that there are similarities and differences among Maroon societies. For instance, there are differences in language, food, and marriage patterns. For instance, Helman points to Saamaka men who are obligated to build two houses for their wives. The Saamaka husband should build one house in the village of the wife and the other in the community of the husband. On the contrary, Ndyukas and Alukus only build one home in the village of the wife.

Nowadays, the Maroon population consists of six Maroon societies or tribes.

Bilby (1990) wrote about the ethnic processes of the Boni/Aluku living in French Guiana based on ethnographic field research for some years in the interior and the coast. He described the emergence of the six Maroon societies formed by the 19th century. He clainms the earliest of these groups were the Saamaka, whose founders escaped from

the plantations during the late 17th and early 18th centuries. Bilby also mentioned the fracturing in the tribe from which another society was formed, the Matawai. The author noted further that the next major society was the Ndyuka.

Additionally, Green (1974) noted that Aluku and Pamaka established their communities soon after the Saamaka and Ndyuka peace treaties in the 1760s and the Kwintis formed theirs in the late 18th century.

This author further noted that all Matawai and the ancestors of a large group of the Saamaka fled from one plantation. Green did field research among the Matawai in the villages and Paramaribo during 1971 and 1973, using participant observation and conducting interviews. He also collected kinship and household data and made use of census data. Although the main aim of his Ph.D. dissertation was to study the migration among the Matawai, he also looked at the ethnohistory, kinship, religion.

Finally, St. Hilaire[12] (2000) citing Price, who claimed that most of the fugitives in the Saamaka tribe were African born.

As can be seen, by the 1760s, the Maroons were able to become stable societies after the peace treaties. They could establish their settlements in specific areas. The stability resulted most likely in population growth.

2.3.1.3 Composition of the original Maroon groups

Several authors claimed that among the first fugitives that eventually formed Maroon societies, most were African-born- some were recent arrivals in Suriname, and some had lived on the plantations for some time. Some fugitives were creoles (in the sense of being born in the New World).

An early ethnographic study done by Kahn (1929) already indicated that Maroon communities consisted of slaves born in Suriname, while others had recently arrived from Africa. Similarly, De Groot (1969) mentioned that the Ndyuka society comprised

[12] The book of R. Price was not within reach. Therefore, reference is made of St. Hilaire

of different groups of people. These were the recent arrived Africans and slaves who had lived on the plantations for a while. Sometimes, they were able to run away with family and friends. De Groot (1969) used historical writings, archive documents, and various sources of information from other scholars. Bilby (1990) confirmed that in the mid-17th century, some slaves ran away as soon as they arrived in Dutch Guiana (i.e., Suriname). Also, Hoogbergen (1992/2015, p. 339) noted that the Boni/Aluku had several years 'plantation experience' before they fled to the forest.

In brief, Maroons are the descendants of African slaves, some ran away shortly after arrival in Suriname, while others lived for a long period on the plantations.

2.3.1.4 Scarcity of women

Several authors (R. Price, 1973; De Groot, 1984; Hoogbergen and De Theye, 1986; Hoogbergen, 1992/2015) talked about the scarcity of women in Suriname society and Maroon communities. Imported slaves were mostly men, as were most initial runaways. They also mentioned that the original groups of Maroons consisted predominantly of men. Van Stripriaan (1993) mentioned that the shortage of women on the estates did not last the entire slave period. Around 1800 there was a woman surplus, and around 1830 there was a male surplus again because of a large import of male slaves during the 1820s. finally, by the end of slavery, there was a female surplus again on the plantations. Oomens (1986), noted that there was a reasonably proportional sex ratio among the plantation slaves in the 19th century. In addition to van Stripriaan (1993), Oomens (1986) said that in 1830 there was a male surplus of 4.6%, and in 1863, there was a female surplus of 4.4 percent.

R. Price (1973) also acknowledged the shortage of women in the early colonial period around the 17th century. A large proportion of runaways were males. A consequence of this majority of men further enlarged the lack of females among the original Maroon tribes in the Americas. The author claimed that in addition to goods such as guns, tools, pots, and cloth, early Maroon communities also took recruits, mainly women from the plantations.

To clarify why this deficit originated, Hoogbergen and De Theye (1986) stated that there was a lower demand for female slave labor, which resulted in the scarcity of

women. They reported that with the abolition of the slave trade in the 19th century, the shortage of women ceased. Additionally, they noted that lists[13] of runaway slaves indicated that women left the plantations to a lesser extent. Hoogbergen and De Theye further gave a partial explanation of why mainly men ran away. The authors explained that men knew the paths in the jungle better because they often went hunting. Women stayed on the plantation because they were responsible for the children. Still, Maroons tried to get women from the estates by persuasion and kidnap. Hoogbergen and De Theye (1986) also remarked that the polygamous behavior of the Maroon leaders contributed even more to this shortage of women.

Hoogbergen (1992/2015) even gives a figure that ninety percent of the runaway slaves were adult men. The young Maroon communities needed women and children to be a balanced society. For this reason, Maroon men went to the plantations and tried to persuade women to join them. It was obviously not easy because slaves chased the Maroons with fierceness if they tried to kidnap women, given the shortage in the entire colony.

Pakosie (2003) is another author that mentioned the shortage of women at the beginning of the Maroon societies. He explained that women, therefore, needed to be well protected. The number of children and women was kept a secret because of this.

Vernon (2019), also, stated that women were “few, precious, and in great demand” in the early years of the Ndyuka society. Men, therefore, kept them safe by not permitting them to move out of the territory until the twentieth century. She indicated that 30 years after the peace treaties with the Ndyuka (1760), the first villages were still named “Kiyoo konde,” meaning ”Guys village” because most of the village population were males (Vernon, 2019, p.148).

The lack of women indicated, initially, a different demographic development in Maroon societies. Consequently, the available marriage partners were small- being a few women and many men. In their early establishment, around the 17th century, this shortage of partners must have had repercussions for reproduction, which in turn affected the population growth.

[13] The list of number of runaway slaves is classified by sex and is recorded in the ARA-SvS (Algemeen Rijksarchief te ‘s-Gravenhage-Sociëteit van Suriname)

Historical evidence indicated that some women brought their infants to the already existing Maroon communities in the forest.

Hoogbergen's study (1992/2015) focused on the history of the Boni or Aluku, and made use of archives, oral tradition, and other written documentation. The author talked about Maroons, who captured a group of slaves in 1774 during one of their pillages on the plantation Groot-Marceille. In the group were a few women with infants. The Maroons wanted to leave the infants behind because they would adversely affect the pace of the escape. The women were unwilling to give the children up. So, Boni[14] allowed them to take the babies. Hoogbergen (1992/2015) also said that many slaves who joined the Boni tribe were from this plantation. The author even said that one of their clans is named after the owner of plantation Marceille (Yakubi-lo derived from Jacobij, who was the owner of Marceille until 1742).

De Groot (1975) mentioned that the great-grandmother Abenkina, is the founder of the two oldest clans in Ndyuka/Okanisi society. Abenkina had run away with a son and two daughters. Her son Pamu is the first Paramount Chief of the Ndyuka society. Helman (1977) gave a similar account.

In another publication, De Groot (1984) alluded to an account of the Ndyuka oral tradition which deals with a group of runaways, consisting of two sisters Moesafo and Cató, their uncle, Cató's husband, Moesafo's two sons (Toni and Pambu) and Cató's baby (Abenkina). The author presented stories revealing that the mother of the sisters stayed on the plantation as 'crioro-mama' (i.e., caretaker of slave children). One of the clans of the Ndyukas is named after Cató.

As shown above, there was a shortage of women among the groups of refugees. To supplement this shortage, the runaway slaves went to the plantations to either kidnap

[14] Boni is one of the most important military leaders of the Aluku/Boni group, and from his name comes one of the two ethnonyms of this tribe. Hoogbergen (1992/2015) claims that the contemporary descendents prefer to be called Aluku, a name also derived from a leader, Aluku, called in the archives the 'stepfather' of the Boni tribe. Hoogbergen mentioned that Aluku was the man who took care of the women and children while Boni and his men were out.

or persuade women to join them. Historical data show that some women also brought their children. The deficit can be explained by the fact that there was a shortage in the colony because lesser female slaves were shipped to Suriname. On the other hand, there was a surplus of male slaves in the colony, and most runaway slaves were male.

2.3.1.5 Kinship system

Several authors pointed out that each Maroon society comprises of a matrilineal system. The clan consists of various lineages, which together can be understood as involving extended families.

Amoksi (2009) said that each tribe has a matrilineal structure. Several matrilineal clans, called “lo,” make up a tribe. The members of a “lo” tend to live in the same village. The lo is composed of several matrilineage, the bees. Amoksi noted that the number of family members that belong to the same female ancestor determines the size of the bee. Each bee consists of several osus (i.e., “houses” or families). Each osu, much like the lineages, comes from the female ancestor.

Additionally, Pakosie (1976, p. 23-27) explained that the bee started on the plantation where husband and wife had children. These children and the children of their mother’s natural sister, if present, formed the ‘osu.’ These children who have the same mother and grandmother have, in turn, children. These sisters’ children and aunts’ children, etc. form the bee. Pakosie (1976) further mentioned that the members of the same lo did not have to be related to each other because the slave owners had sold slaves from different African tribes. These slaves worked together for about ten years for the plantation owners, for example. They lived with each other and got to know each other and started to feel like family because they shared the same fate. When these slaves ran away and met their former plantation residents in the forest, they stayed together and thus formed a group. They then organized themselves under a common name.

They derived the group's name, usually from their former owner or plantation of origin. From this group, they chose a general leader who received the title of Basia. Then there was no mention of Gaanman[15]yet, according to Pakosie.

Bilby (1990) further explained that the first core groups of fugitives who fled at the same time or came together soon after their escape were called lo. The Maroons named each lo after the name of a plantation (or the plantation's owner). Sometimes the lo is named after a region, from which some of the most prominent original members of the group ran away. Hoogbergen (1992/2015) also mentioned that according to oral traditions, each matrilineal clan comes from a group from the runaways.

In a word, Maroons distinguish different segments in their social organization. Each clan is named after their plantation of origin, plantation owner, or a specific region.

Hoogbergen's study (1992/2015) indicated that women were necessary for reproduction in Maroon communities. Women and children were vital for the survival of the Maroon communities. He mentioned, for instance, that the Boni come from several plantations. The name of the estate or owner acted as a family name for Suriname slaves. In a way, the Maroons maintained this custom, as clan name[16]. Children were named after their mother's plantation, hence the name of the clan or lo. According to Hoogbergen (1992/2015), the number of slaves of a plantation did not determine the emergence of a lo. On the contrary, it was the number of daughters and granddaughters that were essential for the establishment of a lo. The author explained that the matrilineage then developed from descendants that could trace their origins through mother, mother 's mother, and so on.

[15] Gaanman is the Paramount Chief of each Maroon tribe, chosen from one specific clan. He has authority over all clans (lo). In Suriname, Paramount Chiefs of both Maroon and Indigenous tribes, receive a salary from the Government.

[16] When registration in the Population register during the 1930s started, authorities discovered that Maroons had several first names but no last names. Maroons were informed that they needed a last name. Green (1974) mentioned that most Matawai used their bee names as last names. However, prior to registration this was not the case. They also chose names from an honored patrilineal or matrilineal kinsman. These names were used by an entire bee or pisi (lineage segment). Few others chose a personal 'family name' which may have been transferred to other consanguines. (Greene, 1974, p.210-212)

Hoogbergen (1992/2015: 340-341) also listed two other factors essential for the survival of the group: the possession of obiya[17] to neutralize the hostile outside world and to have women for reproduction. Men were careful with their wives as women were vital for the survival of the Maroon group. The women rarely went on trips to the plantations. In dangerous situations, women were evacuated to safe places. While the women had a fixed location, the men lived an ambulatory life because they went hunting or fishing or went to horticulture plots.

In short, women were essential in the matrilineage system of the Maroons. The matrilineal clans got their names from the plantations the first runaways escaped from.

2.3.1.6 Breastfeeding and postpartum abstinence

As has been noted before, fugitives were exposed or had personally experienced life on the plantation. The section below discusses reproductive behavior practices on the plantations, such as breastfeeding, postpartum abstinence, and various relationship forms.

Few studies showed that breastfeeding and sexual abstinence after childbirth were practiced for long periods by female slaves.

Oomens (1986) referenced Doctor Kuhn's explanation for the low birth rate during slavery. In 1828, Doctor Kuhn stated several causes for the low birth rate. Kuhn mentioned polyandry as a cause of the low birth rate. Furthermore, Kuhn also cited the long duration of breastfeeding (until after the first year), and no sexual intercourse during the postpartum period, as causes. Other causes mentioned by Kuhn were insufficiently exemption from labor for pregnant women and infertility of many women because of diseases and menstrual disorders. The focus of Oomens' article was about population policy towards female slaves in the 19th century. The sources she used were reports and archives.

[17] Pires (2015) said that most obiya (or obia) are recipes used to bathe and to drink but may also include things such as objects made of metals and bottles. Someone may use this for protection against spells, to cure diseases and injuries, for luck in hunting, to harm the enemy and much more.

Lamur (1995) confirmed that the entire period of slavery (1650-1863), deaths were higher compared to births. He stated that the number of children of female slaves was 3 to 4 in Suriname and other Caribbean countries. Lamur's explanation for the small number of children was related to two demographic factors, namely a short reproductive period and a long birth interval. Female slaves in Suriname had their first child around age 20 and their last child at about age 33, which resulted in a relatively short reproductive period of 13 years. The second demographic cause, still according to Lamur, was the long birth interval of about three years. This long birth interval was caused by the long duration of breastfeeding and sexual abstinence during lactation, according to the author. The short reproductive period suggests that within the 13 years of childbearing, these women also maintained long periods of breastfeeding and postpartum abstinence, which (resulted in birth intervals of nearly three years) affected the number of children/limiting the number of children.

Van Stripriaan (1993) wrote about the plantation economy during 1750-1863 in Suriname and had a chapter dedicated to the slave demography in his book. He collected for three years of information about Suriname plantations in the 18th and 19th centuries and used archives. His study is based on a sample of 204 women from six sugar-, six coffee- and two cotton plantations in the period 1820-1863 in Suriname. Women who had children had, on average, 4.1 children per mother (23.5 % remained childless). The mean age at first birth was 20.4 years, and the mean age at last birth was 31.9 years of age. The reproduction period was approximately 11.5 years, and the birth interval was 3.7 years. Part of the explanation of this birth interval, according to van Stripriaan, is the long lactation period and postpartum abstinence. The author indicated that a new pregnancy during the lactation period was considered as unnatural and harmful to the nursing child. He also mentioned that there was, on average, another year and a half before the next conception occurred. Van Stripriaan stated that this indicates that women consciously chose for a new pregnancy.

Van Eyk, J.W.S (1830) as the representative of the government reported on the Saamaka tribe. He did research in 1827 and gave an account of findings such as the population size, villages, customs, religion, political institutions, justice system of Saamaka during the colonial period in Suriname. The author mentioned that Saamaka mothers breastfed their children for two years or sometimes longer. Van Eyk said that

the ways of life and morals of the three tribes correspond with each other, although Saamaka had some differences. The other two tribes known at that time were the Aucaners and the Becoe or Moesinga negers.

Lamur (1995) cited the research carried out by Frances and Melville Herkovits at the end of the1920s among Saamaka Maroons, which showed that this group practiced breastfeeding of two years and postpartum sexual abstinence of 17 months.

In short, data from the slavery period, as well as from the early 20th century shows that female slaves, and Saamaka Maroons, practiced breastfeeding and sexual abstinence after birth. (Maroon women currently maintain postpartum practices as will be explained further in section 2.3.5).

Further, as discussed previously, some female fugitives had children when they left the plantations. They knew about these practices and have continued practicing these traditions in the early Maroon communities. The literature shows that during the colonial period, female slaves and Saamaka Maroon women had long durations of postpartum practices (Lamur, 1995; van Eyk, 1830; van Stripriaan, 1993).

2.3.1.7 Relationship forms

Few studies reported on mating practices and types of relationships during the slave period.

Kahn (1929) noted, concerning marriage, that girls could choose whom they wanted to marry, but parents could also decide. He mentioned further that women could divorce their husbands for no reason. Examples of reasons could be if the husband were a “poor provider” or “if she was bored with him” (Kahn, 1929, p.480).

Hurault (1959) believed that the relationship of the Boni is a cohabitation and not a marriage. The author also said that there is not even cohabitation in the household. The man and woman live in the village of their maternal kinship. The man lives with his wife occasionally.

Vernon (2009) said that besides the marriages, the Ndyuka know two types of cohabitation. First, when the commitment cannot be made official because it is for instance a polygamous relationship or if two cousins (male and female) have a relationship that the ancestors do not approve. The second is when young people decide to live together without any obligations. According to Vernon (2009), all other commitments are legalized through two official acts namely asking the community approval and bringing a libation to the ancestors to receive their permission. Lastly, Vernon talked about a temporary commitment, named ‘luku bee’, which is not a marriage nor a concubinage. In this case the man must stay with and take care of the woman during pregnancy and after childbirth if he had impregnated her (Vernon, 2009, p.81).

Hoogbergen and De Theye (1986) also referred to the study that was done by Lamur of the history of the Vossenburg plantation in the years between 1847 and 1878.
Lamur’s study findings showed that there were various forms of cohabitation on the plantations: polygamy, monogamy, two-parent, and one-parent families. The woman had a much more independent position than in the monogamous European marriage during colonial times. For instance, the woman often took the initiative to end a relationship. Hoogbergen and De Theye further revealed that the whites reserved the church wedding for themselves. Civil union was incompatible with slavery. Marriages were also forbidden for those whose partner was a slave. Only free people could enter an official marriage. Even when at the end of the slavery period, most slaves converted to Christianity, marriage remained forbidden to them. The husband and wife could only live together if they were both from the same plantation. In other cases, there were "weekend marriages" and visitor relationships, with the men going to the women (Hoogbergen and De Theye,1986, p. 142).

Additionally, Hoogbergen (1992/2015) claimed that many relationships that emerged between Maroon men and women might have been brief. The author also reported that women probably were not monogamous in their relationships. Plantation women also had similar relationship forms. He stated that most mothers would have had children of different men. Hoogbergen (1992/2015) devoted a chapter about the genesis of a matrilineal society.

As has been noted, slaves knew various relationship forms, although they could not have a civil marriage (Hoogbergen and De Theye, 1986; Hoogbergen, 1992/2015). Further Maroon women probably were not monogamous (Hoogbergen, 1992/2015). Maroon women were also free to marry whom they choose and free to divorce their husbands (Kahn, 1929). Hurault (1959) mentioned that the man and the woman live separately.

Given the point that slaves were prohibited from marrying, this may have helped to create other forms of relationships among the slaves. As Hoogbergen and De Theye (1986) stated that although the official marriage was intended for free people, the slaves also had rituals when living together as husband and wife.

2.3.1.8 Polygyny of early Maroon leaders

Several authors also showed that Maroon leaders practiced polygyny. The practice of polygyny affected, even more, the already scarce group of women.

R. Price (1973) said that important Maroon men were polygynous in many areas, such as Suriname, further reducing the number of wives available for the rest of the community. Hoogbergen (1992/2015) also mentioned the practice of polygyny among Maroon men.

Hoogbergen and de Theye, (1986) also noted that Boni, the leader of the Boni tribe, has had many women and several at the same time. In one archival evidence from 1790, Boni complained to the Dutch that he had too little food to support his nine wives.

Van Eyk (1830) reported that polygyny was permitted and occurred among the Saamaka Maroons in 1827.

Given the above, it is safe to claim that the practice of polygyny took place during the early existence of the group of Maroons (R. Price, 1973; Hoogbergen and de Theye,1986; Hoogbergen, 1992/2015; van Eyk, 1830), although it may not be clear when this became a common practice.

2.3.1.9 Colonial Suriname and Maroon societies versus European demographic transition

The following evidence indicates that the demographic Maroon experience is different compared to the one of Europe. In Northwestern Europe, death rates started to decline in the late 18th century with still high birth rates. The birth rates in Europe began to decrease in the late 19th century. On the contrary, colonial powers forced a different demographic development in Suriname during the 17th to 19th centuries. (Suriname was initially a colony of England in the 17th century, 1650-1667 and then again during 1799-1814. In all other periods between 1667-1975, it was a colony of the Netherlands, known for a long time as Dutch Guyana. In 1975, Suriname became an independent country. England and the Netherlands, both Northwestern European countries, have introduced the plantation system (and, thus, slavery) in Suriname from 1650. Through this system, they have imported enslaved Africans to Suriname. Slaves were shipped to this colony from the 17th -19th centuries, but most ancestors of the Maroons were imported during the 17th and 18th centuries (Bilby, 1990). The other enslaved Africans are the ancestors of the group currently known as Creoles. The Amerindians were a small population in Suriname during the 1850s; van Hoëvell (1855) stated that the group was estimated at a thousand[18]. Engerman and Higman (2003) said that by 1700 the population of Amerindians almost ceased to exist in the Caribbean, whereas in the Guyanese coastal region of South America and in British Honduras in Central America, the Amerindian population diminished but not to the point of near extinction. The other ethnic groups of Suriname were brought as indentured laborers from India, and Indonesia, after the abolition of slavery in 1863. The Chinese had already arrived in 1858, also recruited by the Netherlands. Today, these are the main ethnic groups of Suriname.

During the slavery period, Suriname's population consisted mainly of African slaves. In 1830 the Suriname population consisted of 86.4% of slaves (Oomens, 1986). Various authors mentioned that death rates were higher than birth rates during the slavery period (Hoogbergen and de Theye, 1986; Oomens, 1986; Lamur, 1995; Hoogbergen, 1992/2015; Makdoembaks, 2014). In the 17th and 18th centuries, Suriname had death

[18] Currently, they still are a small group. Previous Census rounds indicated that the total number of Amerindians were 3,545 in 1950, and 20,344 in 2012 (Menke, J and Sno, I. 2016).

rates that surpassed birth rates. On the contrary, Europe had high death and high birth rates in this period. The death surplus among the slave population started to decline from the beginning of the 19th century (Oomens, 1986). Not until 1870 did the natural growth of the slave population occur because of a birth surplus (Lamur, 1995). Some studies in other regions where England had brought slavery show a difference in reproductive performance and natural increase. The Caribbean slaves had lower fertility compared to the slaves of the United States. Klein and Engerman (1978) talked about the difference between natural increase rates of slaves in North America and those in the West Indies. Klein and Engerman explained this difference in natural increase by high fertility of slaves in North America. Engerman (1976) stated that there was not much difference in the mortality experience of the slaves of the West Indies and the United States. There were, however, differences in birth rates. The slaves in the West Indies had lower fertility.

Lamur (1995) compared his findings of some plantations in Suriname and those of Engerman and Fogel, which had a comparison of the demographic development of slave populations in the United States and the Caribbean. According to these authors, through almost the entire slave period, the slave population in the United States experienced a significant increase through natural growth. Engerman and Fogel also claimed that between 1810 and 1860, the slave population in the United States grew annually with a birth surplus of 2.5 percent on average. The slave population in various Caribbean countries, however, declined steadily because of low birth rates. Lamur's findings (1995) showed that Suriname had lower cohort fertility than America. In Suriname, the number of births per slave was 3 to 4 in the middle of the 19th century, while in the United States, this was 7 to 8. Higman (1982) mentioned that England experienced population growth in the mid-eighteenth century mostly by natural increase, while the populations of the British Caribbean were maintained only by continually replacing it through population inflow.

The colonizer also prohibited slaves from marrying, therefore causing various relationship forms that did not occur in Europe during that period (as discussed in section 2.3.17 about relationship forms): concubinage, visitor relationships, monogamy, polygamy, two-parents, and one-parent families). Thus, different family formations, living arrangements, childbearing outside of marriage, unmarried

cohabitation, and so on occurred already in colonial Suriname, partly because of the rules laid out by the colonizer. Even in the 1900s, the number of illegitimate children in Suriname was higher compared to legitimate children (Makdoembaks, 2014). These demographic changes began in the 1960s in Europe named the Second Demographic Transition (Lesthaeghe, 2014).

Therefore, colonial Suriname and traditional Maroon societies experienced a different demographic transition compared to Northwestern European countries during the 17th - 19th centuries.

Because Europe imported mostly male slaves, the system caused a shortage of women in the entire society of Suriname and, consequently, for the Maroon societies (as mentioned in section 2.3.1.4 about the scarcity of women).

The shortage of women and the surplus of men in reproductive years for some time (persistent) shows the demographic imbalance that should have had demographic consequences in Suriname and the original Maroon societies in the past. The early phase of the Maroon societies consisted mostly of men. The shortage of women must have affected reproduction and hence birth rates. Thus, there were no high birth rates in the early stages of these societies. What is not clear is the duration of the period that some Maroon tribes had a shortage of women, specifically the oldest tribes[19]. But it still shows that their start as a society was different.

The information also indicates that they already had various relationship forms compared to historical Europe. Khan (1929) reported in the early 20th century that girls could choose their partner for marriage. Women were also free to divorce their husbands for no reason. As discussed in section 2.3.1.5 and 2.3.1.7, on kinship and relationship forms, respectively, Hoogbergen (1992/2015) also stated that Maroon women probably were not monogamous, women had children with different men, children were raised by their mothers and children received the name of the mother. Hurault (1959) also indicated that in the Boni society, there was not even cohabitation in one household because men and women lived separately in their matrilineal villages.

[19] Hoogbergen and de Theye (1986) mentioned that women shortage still existed in 1776, because in that year some Maroons were trying to capture women

Maroon tribes had their food supply because they planted on their horticultural plots since the early establishments of their societies (see section 2.3.2.1 about their Origin). Maroons were not dependent on food from the plantations. The entire history showed that Maroon needed from the plantations, coastal products such as pots, pans, guns, and women (Hoogbergen 1992/2015). They also have their laws, rules, traditions, ceremonies, etc. regarding various aspects of life[20]. Each Maroon society has their social and political institutions (de Groot, 1969; de Groot, 1974; Helman, 1977; Amoksi, 2009). Maroons had a 'highly developed system of medicine' with medicines made from various roots, and herbs (Kahn, 1929, p. 481). In short, they are considered relatively autonomous societies.

Other authors claimed that the traditional Maroon societies most likely have experienced population growth since the 19th century. De Beet and Sterman (1981) stated that pre-industrial societies might also experience rapid population growth long before the modernization process could play a role. Hurault (1959) pointed to population growth in the eighteenth and nineteenth centuries among the Maroon population, namely the Saamaka, Ndyuka, Pamaka, and Boni. The estimated total population was 25,000 around the late 1950s. Hurault indicated that this growth is significant because these societies started with small groups that must have included not more than a few hundred women.

De Beet and Sterman (1981) also talked about the population growth of the Maroons in the 19th century. The authors cited Thoden van Velzen to point to this population increase. The Maroon population was estimated at 7,000 a few years before 1860, and in 1975 it increased to 40,000. At the beginning of the 20th century, the Ndyuka society quintupled. De Beet and Sterman also declared that the majority of the Saamaka and Matawai tribes had escaped before 1667. They are the oldest Maroon societies in Suriname. De Groot (1984) revealed similar accounts of the population estimates. De Groot (1964) explained that improved medical care had caused the increase in population growth.

[20] In 2017, the Ndyuka tribe presented their Laws which they have documented and named 'Deng Weti Fu a Twalufu Lo Gaanmang Meke Tien Na Dii Fu Okanisi' to the minister of Regional Development. This Lawbook contains traditional rules, law enforcement, cultural laws, and penalties that the Ndyuka tribes maintained for 350 years to survive and to maintain order in their communities (Starnieuws, 10 October 2017, article 'Minister Dikan krijgt Wetboek van de Aucaners.' Starnieuws.com).

The next table compares historical versus census data with few discordances. Census data confirm that the Maroon population continued to rise in the 20th and 21st centuries.

Table 2. 1 - Maroon population in Suriname

Historical numbers		**Census figures**	
Year	**Estimated**	**Census year**	**Collected**
(a)	(b)	(c)	(d)
1680	A few hundred		
1740	A few thousand		
1863	6000-9000		
1924	18000		
		1950	19180
1964	27500	1964	27698
1970	39000	1971	39500
		2004	72553
		2012	117567

Source: Columns (a) and (b): de Groot, 1984, p.80- Columns (c) and (d): data extracted from table 4 Bevolking naar etniciteit, 1950-2012. Menke, J, and Sno, I, 2016, p.115 in Menke, J, (ed.), 2016)

As discussed in chapter 2, section 2.2, some Maroon societies, i.e., Boni and Matawai, had previously experienced a fertility decline in the 19th and 20th centuries, apparently due to epidemiological factors. Yet, fertility increased again after that period. According to de Beet and Sterman (1981), the growth rate increased, especially after 1870 among the Matawai. But there was a stagnation in the population growth in Matawai society before 1950.

Documentary evidence[21] of the meeting in 1943 between the Governor of Suriname and the Maroon leaders of the Matawai, Pamaka, and Ndyuka societies confirmed this. Nonetheless, after 1950, this Maroon population increased by 2% every year.

[21] The Governor of Suriname stated as major causes for this growth stagnation, marriage within a small group and the increase of venereal diseases. Whereas, the Maroon leaders named tuberculosis, malaria, many infertile women, and high child mortality (half of all children died in childhood) as causes of this population decline. The government sent medical specialists to investigate the causes of the population decline. The authors indicated that the report of this expedition was not found in the archives (De Beet & Sterman, 1981, p. 375).

According to De Beet and Sterman (1981), increasing life expectancy partly because of a decline in child mortality was the cause of the recent population growth during the 1970s. Matawai women of the 1911-1920 cohorts had, on average, three children. Later cohorts had cumulative fertility of 4.35 children. De Beet and Sterman stated that the number of childless women was significant, despite high marital rates. Hurault showed a decline in fertility in Boni society. The author noted that their cumulative fertility was 7.30 from 1850-1895, fell to 3.83 from 1896-1925, and rose again to 4.52 during 1926–1938. Hurault attributed the fall in the fertility of 3.83 to epidemiological factors during 1920. He mentioned an increase in births between 1888 and 1903. The average number of children per woman over 55 years of age was 7.9 for the period before 1920. The author further stated that the life expectancy at birth before 1950 was 43 years. With the influence of medicine since 1950, child mortality declined, and there was a slight reduction in adult mortality in 1950. According to Hurault, the Boni population doubled from 1895 to 1925. He claimed that nothing is known about the evolution of this population before 1890.

Europe experienced until the late 18th-century high death and birth rates. Death rates began to decline in the late 18th century in Northwestern Europe. High birth rates still existed during this period, which then led to an increase in the population. During the late 19th-century, birth rates began to decline in Northern Europe (as discussed in section 1.6).

If the above information is accurate, Maroon societies had a different demographic experience compared to European societies. Firstly, early Maroon communities had a shortage of women, which consequently affected the reproduction performance of the group. Afterward, Maroons may have experienced a phase of higher birth rates compared to death rates and the decline of fertility in approximately the same period or after Europe. Maroon societies most likely also have experienced the onset of the demographic transition before Latin America. Maroons furthermore had other values such as divorce before Europe went through the second demographic transition in the 1960s with rises in divorces, cohabitation, and so on.

There is no scientific evidence yet, but these are the findings indicating that Suriname and the Maroons have had a different demographic experience. Thus, the European

(western) demographic transition is different from Suriname, including the Maroon societies. Further research is necessary.

There is sufficient literature concerning the history, the social and political institutions, and religion. However, historical documentation of their reproductive behavior is quite incomplete.

2.3.2 The status of women in Maroon society and Suriname

A few studies indicate that Maroon women occupy an essential place in the social and political structure of the community. The findings also reveal that the status of these women is changing.

2.3.2.1 Social and political organization

Studies indicate that Maroon women occupy an important place within the social and political structure of their societies.

Sally Price (1984/1996) mentioned that Maroon kinship is strongly matrilineal. Women must ensure the survival of the lineage by producing children for their families. From childhood, girls hear that they are essential for bearing children and providing the family with children. Young women are encouraged to remarry and have children if their husbands stay longer than a year on the coast. Infertile women may divorce and remarry, hoping that the new husband can get them pregnant.

Another author also pointed towards the importance of the woman in the matrilineage. Pakosie (2003) said that the Maroon woman is the founder of the family. According to him, the man used to speak on behalf of the woman in public meetings (kuutu) because they believed that women were in danger during such sessions. The Maroons believe that if “man dies, then a loner died, but if a woman dies, then entire generations disappear” (Pakosie, 2003, p.4). Pakosie also indicated that men in the family first consult with women before they make decisions because men must consider the will

of women since they are the founders of the family. Pakosie noted that in 1994, Gaaman of the Ndyuka, Gazon Matodja, appointed for the first time in history women as kabiten[22].

Further, Pakosie (2003) gave an example of a female basiya[23], Antionette Bertha Wilhelmina, better known as ma Kubikubi, who was the leader for several years during the middle and end of the 1950s in the Kwiinti society. Ma Kubukubi received government recognition, which resulted in recognition of female basiyas by the Government. Pakosie revealed that, among the Ndjuka, a woman from the family is also appointed as 'umangaanman'[24] during the inauguration of a Gaanman. The Umangaanman guides and corrects the Gaanman. Pakosie who write from a historical perspective, indicated that men hold the highest administrative function, but the women manage such function.

Also, Amoksi (2009) pointed to the importance of women's position in Maroon societies because the six tribes have a matrilineage institution. Amoksi talked about the changes that occurred in the role and status of Maroon women in Maroon and Surinamese society. Amoksi (2009) looked at the consequences of urbanization for the Maroon women in Suriname from a historical perspective. Some of the themes that she discussed are the position of Maroon women until 1945, the urbanization process, and changes in the socio-economic status of Maroon women and the changes in traditions. Amoksi did a historical study. The author mentioned that she knows from experience, as a Maroon woman, that changes occurred in the role and position of Maroon women.

Amoksi (2011) explained that a Maroon woman contributes significantly to the family's livelihood: she plants and goes fishing and hence, can feed her family. The author also said that the girl is the wealth of the bee: she expands the family and is also a carrier of the culture. A man who has many sisters is respected and has a lot of power, according to the author. But if a Maroon man does not take care of his wife, it is a problem for the entire family. Moreover, the author said that the matrilineage, thus the Maroon woman, delivers the successor of the leadership. Behind the scenes, women

[22] Kabiten is a head of a lo/clan or of a village (Pakosie, 2003)
[23] Basiya is an assistent of the 'Kabiten' and the Gaanman (Pakosie, 2003)
[24] Umangaaman is the woman in the family that guards the quality of the leadership of the Gaanman. In the past there used to be also a Umankabiten with the same responsibility. (Pakosie, 2003)

play an essential role in decision-making. Men who make decisions talk first with older women from the bee/family.

In summary, Maroon women must provide offspring for the matrilineal tribes. They are involved in decision-making. Some hold administrative functions within their political structure. Furthermore, changes have taken place in which women have higher positions in that structure—for instance, the appointment of the female heads of the villages. But Maroon women still must take care of their families and are also carriers of their culture.

2.3.2.2 Autonomy versus Dependence

Few publications talked about the autonomy of the Maroon woman.

S. Price (1983) declared that many outsiders often think that the relative independence of Maroon women also extends to other areas of their social life. Price emphasized that there is a misunderstanding about the freedom of Maroon women. Their independence often is wrongly viewed as a 'kind of 1970s-style liberation,' and matriliny[25] is confounded as matriarchy (S. Price, 1983, p.461; S. Price, 1984/1996). Price's article (1983) is based on long-term fieldwork among the Saamaka Maroons in very traditional villages in the interior. The author wrote about two aspects of Maroon's society, namely the place of women and the role of art in social life. She argued that there also is generally a misunderstanding of the social and artistic life of Maroon women.

S. Price (1984/1996) also mentioned that Maroon women are independent in many respects. They live in their own house; have another house in the village of the husband. They have a garden and produce food. Women often rear their children as single parents. The author pointed, however, to the material dependence of Saamaka

[25] In the anthropological jargon, matrilineal society is also called matriliny. Matriline is the lineage of the mother.

women on their husbands: men build houses for the wives; make canoes for them to use as transportation to and from her garden. Before the woman can plant the garden, a man also clears the plot. Men also provide meat and fish, as well as household products like pots and pans. Price (1983) added that women, on the other hand, take care of meals and clothing for the man.

Similarly, Helman (1977) said that Saamaka men are required to build a house for the wife in her village and a home in the husband's community. He further noted that both men and women have obligations within a marriage. The woman must take care of the husband by cooking, being responsible for domestic chores, taking care of his hair, and so on. The husband must provide economic support such as houses, providing meat and other products, cleaning the horticulture plot. On the other hand, Amoksi (2011) explained that the Maroon society expects the man to do certain things for his wife. Otherwise, the man is of no good. Moreover, Prijor (2018) stated that highly educated Maroon women are less dependent on their partners. Decisions are taken together with the partner. But the partner expects that she is still responsible for taking care of the children and the household. Prijor researched 15 highly educated Maroon women between 25 and 40 years of age.

In contrast, Vernon (2018) indicated that despite the professional status of educated Ndyuka women, husbands still tell them what to do, have affairs and take a second wife.

In short, Maroon women in the interior are, on the one hand, socially independent. They live in their houses and provide for their families. On the other hand, they are material dependent on their men and must take care of their husbands. However, Amoksi (2009) stated men must take care of certain things according to the tradition. Also, in the urban areas, we see two types of educated Maroon women with careers (Prijor, 2018; Vernon, 2018). One who can make decisions together with their partners, even though they are responsible for the children and the household. The other whose husband tells them what to do.

It can be argued that women are independent in some respects and are material dependent. Also, most likely because of their tradition, as Amoksi (2009) stated, the man

is responsible for doing certain things such as cleaning their horticulture plot, providing goods, and building a house in the interior.

S. Price conducted her fieldwork during the late 1960s and early 1970s. Helman also wrote his book in the late 1970s. A lot has changed since then. Today it is much more common for men to have a wide variety of jobs in Paramaribo or even in the villages or in the interior where they are involved in, for example, gold mining and lumber.[26] Gold mining and lumber were common since the 19th century. Some women are also employed. The gardens, fishing, and hunting continue, but a growing monetary economy supplements it. In recent decades, changes have also taken place in villages that have made women economically active. Jobs in the city became much more common for men and women since the mid-twentieth century. Nowadays, some Maroon women are financially independent and can build their own homes and buy these material things themselves (Amoksi, 2009; Vernon, 2018). In the city/urban areas, some women are economically dependent (Amoksi, 2009).

2.3.2.3 Changes in Maroon women's status

Other studies reported that changes occurred in recent decades that affected the lives of Maroon women.

Vernon (2009) talked about the changes that took place in the lives of Maroon women. One of the factors was the construction of the Brokopondo reservoir in the 1960s, where people in the nearby villages had to be evacuated to transmigration villages near Paramaribo, among others. Consequently, it was easier for Maroon women to go to town. These developments brought about several changes. The Maroon women could sell their products from their horticulture plots in the city. Their children could continue their studies. Others were able to settle permanently in the city because their husbands worked for the government.

Another circumstantial factor also played a role as the outbreak of the Civil war (19861992). People fled to Paramaribo and French Guiana. During the war, women

[26] Maroons are living in areas with natural resources such as gold, bauxite, wood.

were able to move more than men. So, they could sell their products in French Guiana. Some were also able to build a house that was not possible before. Another significant change the author mentioned, is the appointment of women as female village chiefs started in 1994 by the Paramount Chief of the Ndyukas, Gaanman Gazon. The Pamaka tribe appointed female village chiefs in 1998, and then the other tribes followed. Women can now go to cities independently to earn money. Others have followed further education in the city. Nowadays, some women hold high positions at companies, the government, and other organizations. The men do not always appreciate these independent positions, Vernon said.

Additionally, Amoksi (2009) pointed to the changes taking place in the role and position of Maroon women, both in Maroon and Surinamese society over the years. In the past Maroon women from the interior never or rarely went to the city. The man provided her with the products she needed, like pots, pans, and clothes. The main task of the woman in the Maroon society was to have children for the family/bee. The author continued to say that several factors had an impact on the traditional Maroon society. These factors were urbanization, industrialization, modernization, mission, education, and the Civil war. As a result, changes occurred, including in the role and position of women. Further, Amoksi (2009) said the marriageable age of both boys and girls is rising because of an increasing number of girls participating in education. Social mobility brings them more in contact with other population groups, and Western influences are increasing. In the city, there are also more opportunities for girls to be educated than in the interior. Nowadays, according to Amoksi, Maroon women are found in low and high positions in the labor market.

Also, Amoksi (2011) indicated that not only women that leave the tribal area experience change but also women who stay in the villages. Developments are taking place in the interior. Women no longer need to carry water because of piped water that is within reach. They cook on gas nowadays. Energy-saving lamps are used. The author underlined that western-style education was introduced in the interior in 1762. In the mid of the 1960s, schools were built for the populations in the interior. The Moravian and Roman Catholic church provided education. The primary purpose of these missions, according to Amoksi, was Christianization.

To summarize, changes in Maroon women's life have occurred. Women could educate themselves. Others could earn money. Some women hold senior positions in organizations, businesses, and government. Nowadays, they are also active in politics.

Some are members of parliament[27]. Some women could send their children further to school. Also, the number of girls going to school increased. Some consequences were that the age to marry also increased for both boys and girls. As a result of participating in education, they encountered people from other population groups and with Western influences.

Some factors have played a role in achieving or affecting these changes. Vernon indicated that the building of the hydro-electric dam and the outbreak of the Civil war had brought the changes. On the other hand, Amoksi pointed out the industrialization, modernization, mission, education, and, again, the Civil war.

Amoksi added that developments have also taken place in the interior, which also influenced women's life.

The above shows that the lives of women have changed who migrated to the city and those who remained in the villages.

2.3.3 Socio-cultural context of Fertility

There are social institutions and norms in the Maroon communities that encourage childbearing. After the rite of passage of adulthood, girls can get pregnant. Pregnancy is also accepted if a girl gets pregnant before the rite of passage. Most people desire large families. Girls are essential for the existence of the lineage. Because of their matrilineality, the emphasis is often on girls. However, boys are also considered necessary. Maroons believe that sexual intercourse during pregnancy helps with the development of the child. However, sexual intercourse is not allowed in the last three weeks of pregnancy since Maroons assume that complications can occur during childbirth or that the child can be born with a disability. Children are needed to help

[27] As far as the author knows, Suriname provides data regarding female share of seats in parliament, of employment in senior and middle management and so on, but not by ethnicity. She is therefore not able to provide data on these indicators.

with domestic chores, as a company and to support in old age. Children are social status for men and women. Maroons also maintain postpartum practices. (S. Price, 1984/1996; Polimé, 2000

Furthermore, evidence from before 2010 indicates low use of contraceptives (Jagdeo, 1993; Goede, 2010; Terborg, 1999; Adams, 2003). Maroon women also practice breastfeeding (de Beet and Sterman, 1978; Adams, 2003).

Another essential practice is the existence of polygyny. In traditional Maroon culture, a man may marry as many women as he can support. Polygyny contributes to men having children with different women, thereby also being a factor in the population increase.

2.3.3.1 Socio-cultural context concerning fertility

De Beet and Sterman (1978) claimed that among the Matawai, a girl could marry after she left school, usually at age 16. Men's age at first marriage is four or five years higher because they are required to work for a few years after leaving school. De Beet and Sterman (1978) also cited that children are wealth because of their help and company. Children are cherished. Women and men who have many children have status.
Women who cannot have children use traditional medicines to improve infertility. De Beet and Sterman (1978) further point to the absence of modern contraceptives. But they indicated that sometimes coitus interruptus is practiced. Matawai also knows a few methods to avoid pregnancy. De Beet and Sterman (1978) used genealogies of all groups in the Matawai society. They also used a survey to collect the marital and reproductive histories of all adults. The Matawai is one of the smallest Maroon communities with approximately 1,700 persons at the time when De Beet and Sterman did their research.

S. Price (1984/1996) stated that there are different reasons why bearing and raising a child are essential for Saamaka women. Women produce children for their lineage to ensure its continuity, and as a guarantee for care in her old age. She further maintains her influence as an ancestor when she dies. Women see life without children as lonely,

and they benefit from their help since young age. Besides, women are proud to see how their children become functioning members of society.

S. Price (1984/1996) noted some measures that are taken during pregnancy to ensure that the fetus develops well. Through frequent intercourse, the father nurtures the embryo. Problems and complications during pregnancy are determined and cured by calling upon spiritual powers. Various rituals are done, such as prayers, offerings to gods and ancestors, ritual washing, making medicinal necklaces. During pregnancy, there are a series of prohibitions that the parents-to-be should keep. For instance, the man may not help with a burial, take on a new wife, hunt deers or tapirs, and the woman cannot eat some species of fish and must use cold water instead of hot water when she has her morning baths.

Polimé (2000) did field research from 1988 to 1998 among the Ndyuka in the east of Suriname and the west of French-Guiana. The author wrote about the reproductive rituals among Ndyukas. Some of these rituals are partner choice and marriage forms, the rite of passage, menstruation, pregnancy, childbirth, childcare, the naming of children, and levirate marriage. He claimed that the girl is free to become pregnant after the initiation of child to adult. If she gets pregnant, she tells her mother or an aunt. They tell it in turn to others, for example, the girl's father. During pregnancy, the woman must follow/obey certain customs and habits. In the first six months of pregnancy, sexual intercourse between the pregnant woman and her husband is allowed. It is the custom with the Ndyuka that the expectant father lives with the woman in the first six months of pregnancy. Maroons assume that regular sexual contact between men and women is essential during this period believing that semen is necessary for the further development of the embryo.
Polimé also revealed that a pregnant woman must abstain from sex during the last three weeks of pregnancy. Maroons think that complications can occur during childbirth, or that the child can be born with disabilities if the mother has many sexual contacts during the last weeks of her pregnancy.

Terborg (2000) reported that Maroon women and men value fertility. The more children a man has, the more social status he gains. Maroons believe that the children a woman

will have during her life are already in her womb. Therefore, one must not hinder the childbearing process. Terborg did research about sexual behavior and sexually transmitted diseases among Saamaka Maroons.

S. Price (1984/1996) stated that older Saamaka women get a child to raise partly to help them with domestic chores. These are older women who have no husband; often, women do not remarry when they are widowed or divorced in their forties or past menopause. She mentioned that Saamaka expresses the state of unmarried life as material poverty. An unmarried woman will not have the meat and fish and other necessary products like salt, soap, clothing, canoe because the man provides these things.

Green (1974) claimed that a childless woman among the Matawai might raise children from other kin who have many children until maturity. The woman must return the foster children, at approximately age 17, to their mother and the mother's bee. The author also revealed children, up to a certain point and number, are an economic asset for Matawai. At a young age, 6 or 7, children of either sex begin to contribute to the food supply. Children catch fish, collect wild fruits, help with the planting of fields, or run errands such as repairing the roof. Still, according to Green (1974), Matawai men said that too many mouths to feed and not having sufficient meat is the reason that limits them from having many children. Another reason mentioned is that the parents' hut is too crowded when having many children. Green stated that the mothers he had interviewed found three children the best number to have.

Amoksi (2007) declared that Maroon women in the city became more conscious of practicing family planning and delaying marriage and childbearing. Factors such as urbanization, Christianity, education, and labor force participation in recent decades have brought changes in the lives of these women.

Prijor (2018) noted that highly educated Maroon women who are pursuing careers and are in leadership positions, choose to have few children or stay childless. Prijor further said that it was different for traditional women because one was more confident of the existence of the family if one had more children. Nowadays, women determine for

themselves to have children. Additionally, Prijor indicated that both traditional women and educated women must take care of children and must fulfill their duties as women in family life and matters of the bee or in-laws. She interviewed 15 women between the ages of 25 and 40 and looked at how highly educated women combine their careers and family life. She concluded that these women have a good relationship with their partners and that they make decisions together. However, these respondents indicated that household chores are entirely left to them.

Male absenteeism[28] in the Interior

De Beet and Sterman (1978) revealed that most Matawai desire large families, but their fertility is low. The authors discussed male absenteeism as an indirect factor in the fertility level among the Matawai. They concluded that the decline in sexual intercourse because of male absenteeism does not affect the low fertility level much.
They stated that migration has led to a shortage of male marriage partners.
On the contrary, Green (1974) declared that Matawai has a balanced sex ratio.

De Groot (1983) talked about the shortage of men in the villages. The increase in Maroon migration had consequences for village life. She further noted the fall in the birth rate. S. Price (1983; & 1984/1996) also said that there is a lack of husbands. Because of the long-term emigration of men to the coast, the group of available marriageable men at a time decreased by 50 percent. Terborg (1999) mentioned the imbalance in the male-female sex ratio in the Maroon villages due to the enormous labor migration of men, especially young men.

Pires (2015) indicated that absenteeism is a result of male labor mobility for long periods. According to the author, nowadays, men stay away for shorter periods from the villages because of improvements in transportation. However, a more significant number of male and female Saamaka live in Paramaribo, French Guiana, and the Netherlands.

[28] There is no statistics available to show the imbalance in the sex ratio. Mainly men used to migrate. When one visits a village, mostly men are absent.

2.3.3.2 Cultural institutions and practices

Several studies discussed various cultural practices among the Maroons. Among others, the rite of passage to adulthood, menstrual customs, traditional marriages, and polygyny.

2.3.3.2.1 Rite of passage to adult age

Some authors talked about the rituals among Maroons when young people become mature.

Polimé (2000) said that the rite of passage happens in two phases with girls. Boys, however, have the rite of passage once. This practice in boys is rare nowadays among Eastern Maroons (Ndyuka, Aluku, and Pamaka). In the first rite of passage, biological maturity is essential, age is not relevant. The Ndyuka give the 'kwei'[29] to the girl, and boys receive the 'kamisa[30].' This is simple gift giving, and there are no elaborate rituals taking place here. The second phase of the rite of passage happens when the girl is 16 years old, and here age does play an important role. With the initiation, girls are not allowed to do some things anymore. For example, they are no longer allowed to cook during menstruation.

Furthermore, the girl receives gifts such as household goods, clothes, and towels. She is now required to wear a pangi[31]. She has now become independent to live in her own house and must get her own horticulture land and canoe.

Still according to Polimé, a practice that a girl should follow from the moment she gets pangi, is that she must wash her genitals with warm herbs every morning as the other women do. She does the washing in the morning and evening before she goes to sleep. In the morning, she must have washed herself first before starting her daily pursuits, as well as the preparation of food. A traditional gift that a girl receives at the coming-of-age ceremony at the ceremony is the kettle. The kettle is a symbol of female

[29] Kwei is the Ndjuka name for a cloth that covers the genitals of the girl (Polimé, 2000). The Saamaka know it as kojo

[30] The kamisa is a cloth wrapped around the hip of the boy (Adams, 2003). There is another clothing item named kamisa that the puerperal woman wears in the postpartum period. This kamisa is used as a sanitary napkin (further explanation in Chapter 4, section 4.3.5)

[31] Pangi is a skirt given to girls when they become mature (Adams, 2003)

adulthood. She cooks the herbs in this kettle. Next, the adult woman uses a pot in which she placed the hot herbal water with which she washes her genitals. Polimé explained that her grandmother teaches the young woman certain things, such as herbs and their effects. A grandmother cautions a woman not to make too much use of friends' advices when using herbs and about dealing with her husband. In those matters, one must first consult with a family member.

Saaki (2018) also confirmed that the rite of passage declares the stage of independence of the girl. She explained that “gi pangi” (“giving [her] the skirt”) indicates the independence and maturity of a girl. Women in the Interior receive pangi between fifteen and eighteen years of age, while Maroon women in the city experience this ritual later in life. The paternal family does it, and the girl's mother can choose which of her in-laws will do the ceremony.

Furthermore, Saaki said that if the girl has not received the pangi, she cannot come up for herself. She cannot participate in conversations with the adults. After the rites of passage, the woman is required to do vaginal cleansing every morning and evening, regardless of whether she has a husband or is sexually active. She must isolate herself when she is menstruating because she is unclean during that period. Women are also not allowed to cook for their husbands during this period. They even cannot sleep on the bed with him during this period. Saaki also noted the rites of passage for boys. Young men get the kamisa. Saamaka young men still get kamisa even if they are “modern”. According to tradition, the uncle on the mother's side must raise the boy. This uncle teaches him important things like making a boat and a hut. The young man also learns that he must treat his wife well. If this does not happen, the ‘kamisa’ will be taken back.

Also, Adams (2003) mentioned the rituals concerning adulthood. In focus group discussions, male and female participants talked about the custom of giving kojo[32], pangi, and kamisa. Girls receive kojo and pangi. On the other hand, boys get kamisa. As a rule, the tia (aunt) of the father's side presents the kojo. The father gives the kamisa to the boy. After the girl has received the pangi, she can marry (traditionally)

[32] Kojo is a loincloth given to a girl when she has pubic hair (Adams, 2003). The Ndyuka know it as ‘kwei’

and have children. The tradition, however, is slightly different in villages that have the traditional way of worship and those that have the Christian religion.

Polimé (2000) also talked about another form of initiation. This initiation takes place when a girl is pregnant before she officially receives the rite of passage. With unintended pregnancies outside of marriage, the ritual takes place around the third month. It is a simple rite without many ceremonies. Usually, a female relative of the father performs this ritual, but also the mother can perform the ceremony. In this way, the family makes it known that they do not agree with pregnancy. However, after the rite took place, the pregnancy is accepted.

Saaki (2018) also indicated that a girl can refuse the pangi when she knows that she is pregnant (and it is not visible yet). If a younger sister is pregnant, the other sister gets her pangi sooner. The younger sister has disgraced the family by unexpectedly getting pregnant before receiving a pangi, and the others get it because of the shame the sister has caused to the family.

S. Price (1984/1996), on the other hand, mentioned that if an apron girl[33] becomes pregnant, she receives skirts and gets married instantly. If she is sexually active, although not pregnant, she also receives skirts.

To summarize, the rite of passage is performed among the Maroons when adolescents mature (Polimé, 2000; Adams, 2003; Saaki, 2018). The findings show that not every Maroon society practices these adult rituals anymore. In the Ndyuka society, the rite of passage for young girls and boys is diminishing (Polimé, 2000). However, the Saamaka society (Saaki, 2018) still gives boys the kamisa. It seems that the tradition is adjusted when someone practices Christianity (Adams, 2003). The father's family is involved in this ritual (Adams, 2003; Saaki, 2018). After the ceremony, girls and boys are allowed certain things. However, they must also adhere to other rituals. For instance, she can live on her own. She also must take herbal baths regularly. Another

[33] A Saamaka girl becomes an "apron girl" when her nipples are starting to develop. A ceremony is held, and she wears an adolescent apron. After that she receives the skirts of womanhood (S. Price, 1984/1996, p. 15-16)

initiation is performed when a girl becomes unexpectedly pregnant before she experiences the ceremony. Unintended pregnancies before the rite of passage bring shame to the family. After the rite, the unintended pregnancy is accepted (Polimé, 2000; Saaki, 2018).

The age when rites of passage are carried out, show the age that adults may start a family. Hence, the impact on fertility because the earlier one begins, the longer the period of exposure to pregnancy/reproduction.

Next, the tradition of menstrual seclusion is discussed.

2.3.3.2.2 Menstrual customs

Several studies indicate the customs that take place during the period of menstruation.

S. Price (1984/1996) said that Maroons believe that women's uterine fluid threatens ritual powers. There is a belief that childbirth and menstruation are polluting forces. They think that a house in which a baby is delivered is contaminated. Thus, it is a threat to men and their ritual powers. Menstruating women cannot come near most buildings and can only be in houses that are allocated for menstruating women.

Sometimes they stay at their horticultural camps during this period. S. Price also talked about other prohibitions that women should maintain. For instance, menstruating women cannot walk through certain areas, paths, and village entrances. They cannot touch small babies, sit on stools, plant crops, hand anything to a man, cook for men, carry water that others will use, and so on. S. Price furthermore revealed that Saamaka believe that a woman can become pregnant immediately after a menstrual period. A husband should, therefore, prefer to sleep with her once she comes out of the menstrual hut even if he has other wives. The author said that after the skirt giving ceremony, the girl should stay in the menstrual hut.

Additionally, Polimé (2000) said that when the girl is menstruating for the first time, she tells her mother about it. The mother tells her what to do. Nowadays, girls do not use kwei anymore because most of them wear panties. Young girls can cook during their periods. There are no prohibitions for young girls. However, the adult woman does not

sleep with her husband during menstruation. She stays in a special hut at the end of the village during this period, wherein only women who menstruate are allowed. There are other restrictions. Polimé (2000) noted that women on their periods are not allowed to cook for adult men and older women and are not allowed to eat from the same pan or drink water from the same jug as someone else, except kids. They must bathe in the river, wash their clothes, and their hammocks when they finish menstruating. On their chest and back, they smear a mixture of herbs and white clay (kaoline). Putting this mixture is a sign that she is no longer unclean.

Also, Adams (2003) mentioned that the tradition of a "monu oso" (“moon house” or menstruation hut) is still present in the traditional villages, but not in the Christian villages.

As can be seen, Maroons know menstrual huts, a house where the women live apart when having their menstruation. Christian villages, however, have no separate house/hut, but the woman sleeps in another room of the house when she has her period (Adams, 2003). There are also other taboos. Women are prevented from cooking for other people during this period. They, too, cannot walk in specific paths or bathe in certain areas when they are having their menstruation, depending on the village, where the woman lives (S. Price, 1984/1996). Only when a girl has been declared an adult, she must adhere to the tradition (Polimé, 2000). S. Price (1984/1996) noted an interesting notion held by the Maroons that the husband should have sex with his wife after the menstruation period because it is believed that she can get pregnant instantly.

The following section discusses the institution of marriage.

2.3.3.2.3 Marriage

Several studies reported the marriages of Maroons. Green (1974) confirmed that there are three forms in the Matawai: legal marriage, church marriage, and traditional marriage, being the latter the most common. The author further divides traditional

marriages in two kinds: one is the ‘hasty’ marriage, which frequently occurs, when a man impregnates a woman, and the bee wants to legitimize the baby. The bee put some pressure on him to marry the woman (Green, 1974, p.144). The second kind is the formal marriage where the man asks his kin to request the woman’s bee formally for her hand in marriage. But Green said that the man first makes sure that he gets approval from his girlfriend to avoid disgracing his bee when they go to the woman’s bee.

Green (1974) further mentioned that men and women must be mature if they want to marry immediately. According to him, maturity involves that a couple has learned sufficient skills to be economically self-supporting. For instance, a woman must know how to prepare food, how to sew, how to maintain the horticultural plot. A man must know how to hunt, how to make a canoe, how to build and repair a house. On the other hand, Green said if the couple is not mature enough, the woman’s bee recommends an engagement period. The engagement period can last a year or two. The wedding takes place until the couple is mature. The marriage can occur sooner because of fornication or pregnancy. Green stated that there is no engagement period for older men and women because they are considered mature enough for an immediate marriage.

Green further said that Matawai does not know the concept of “bride's price”, common in African societies and elsewhere. The author noted that Matawai does not like to think of women being sold or bought. However, there is an exchange of gifts. If the man wants to marry, he purchases several goods that are essential to set up a household with a woman.

De Beet and Sterman (1981) confirmed that Matawai has three marriage forms. Firstly, traditional marriage. Second, marriages formalized by the Moravian or Catholic Church. The Mission acknowledges traditional marriage, but it should be done in the name of God, which mean the union cannot be dissolved by divorce. The church will try reconciliation in cases of arguments or separation.[34] The third marriage form is the civil marriage in Paramaribo. De Beet and Sterman said that traditional marriage is not acknowledged in the coastal area. Therefore, some Matawai men, who have stable

[34] De Beet and Sterman also revealed that Matawai had a high percentage of the total married population, 64%. The authors believed that this is the result of strong church influence.

governmental jobs and have obtained some property, choose for this marriage form. Thus, they can benefit from several social security facilities for their wives and children, as opposed to their wives' lineage. They are also assured that their children will inherit their property when they die. The authors reported that six couples in 1974 had a civil marriage. They further indicated that Matawai do not see permanent celibacy as a choice: unmarried status is usually temporary for men and women in cases where the partner is lost by divorce or death.

S. Price (1984/1996) showed that a girl could marry after the skirt-giving ritual. It is anticipated that shortly after the skirt-giving ceremony, girls should get married. The author stated that most of them do so within the year. In this study among the Saamaka Maroons along the Upper-Suriname River, it was found that most girls have married and take on the full adult status by about the age of sixteen. Price also mentioned that between the ages of about fifteen and thirty-five, most women remain unmarried for a short time. Most women remarry soon when they become divorced or widowed. The author revealed that being married does not guarantee the company and help of the husband. The reason is that men stay away from the Saamaka area for long periods of their lives to earn money. Wives used to stay behind.

Furthermore, S. Price (1984/1996) indicated that in the Saamaka perspective, only the man has the right to make demands to his wife. For example, he may send her to do something, ask her to cook or restrain her from going somewhere. On the other hand, she may never propose to him to go hunting or fishing. When something needs to be done, she must ask officially often with the help of his relatives.

Adams (2003) stated that most women were married traditionally In her survey, she included in the marital status question: legally married, traditionally married/live together and traditionally married/does not live together. The mean age at first marriage among females varied between 15 and 18 years. Futunaakaba and Pokigoon had a higher mean age: 17.9 and 17.4 years, respectively. In Masiakiiki the mean age at first marriage was 15.7, and in Malobi, this was 15 years. In Malobi, over 32% got married between the ages of 12 and 14. Malobi also had a high percentage

that did not know their age at first marriage. According to the author, this is expected because of the high percentage that never attended a school.

As shown above, Maroons have a traditional form of marriage. However, Suriname's legal system does not acknowledge them. Other forms of marriage are also practiced, such as church marriage and civil/legal marriage (Green, 1974; De Beet and Sterman, 1981). In Maroon societies, Church influence is noticeable (Green, 1974; De Beet and Sterman, 1981; Adams, 2003). According to De Beet and Sterman, the Church tries to reconcile couples to avoid a divorce. The family also plays an essential role in the choice of a partner (Green, 1974). The age at first marriage occurs in the adolescent period (S. Price, 1984/1996; Adams, 2003). De Beet and Sterman (1981) also mentioned that permanent celibacy is not a choice in
Matawai society. S. Price (1984/1996) and De Beet & Sterman (1981) noted that Maroon women do not remain unmarried for long. Green (1974) stated that a couple should be mature if they want to get married immediately. Both girls and boys must learn specific skills to be self-sufficient before starting a family. Also, before a man could marry, he must earn money to buy the goods that are necessary to set up a household (Green, 1974).
They also know rights and obligations for partners in a marriage.

Relationship forms

Few studies discussed the various relationship forms among the Maroon population. Polimé (2000) mentioned the various relationship and marriage forms among the Ndyuka, whereas Menig (2008) talked about the relationship forms among the Saamaka. The relationship forms that lead to marriages are similar but have different names.

Polimé (2000: 244-254), talking about the Ndyuka, that polygyny is a traditional marriage form. In addition to his wives, the man can also enter love relationships with other unmarried women which may lead to a permanent relationship. The persons involved can then marry according to traditional rules.

Polimé further noted that there are several relationships forms among the Ndyuka that should lead to marriage. One traditional relationship is called “naki-bee” relationship (literally “knock belly”). Parents of a boy can ask if the baby of a pregnant woman can become the wife of their son. In case it is a girl, she could become the wife of the son.

If, on the contrary, the baby is a boy, the two boys will become friends. Upon agreement, the mother receives a gift for the future child. Thus, it is clear who will be the husband later of the girl. According to Polimé, this form of pre-marriage is not always a success in practice. Another kind of pre-marriage, the author continues, is the so-called “poti mofu uma” (literally “put your mouth [i.e., word] on a woman”). The father or mother of a boy may see a girl whom they think could be a suitable wife for their son in the future. They tell their son, and if he agrees, the parents make an official proposal to the girl’s parents, who generally approve. From that moment on, the girl often receives gifts from the boy's parents, especially clothing and jewelry. The boy helps his future parents-in-law by doing, for example, labor for them. The girl, in turn, also assists her future in-laws during, for example, the harvest period, and she occasionally cook for the boy when the boy visits her in the village. The future husband and wife grow up together but are not allowed to go out together alone without the consent of the parents or sleep together. The boy sleeps in another house when he visits the girl. The reason for this sexual restraint is that an official marriage has not occurred, and that the girl has not been initiated as an adult yet. This form of marriage is not always a success because the boy or the girl can decide at a later age that they no longer want to marry each other. The third relationship form, according to Polimé (2000), is named “begi uman” (literally “ask for a woman”). The man proposes to an unmarried adult woman. If the woman agrees, the man must inform the woman's family of the intended marriage. One speaks in such a case of “wasi koi uman.” The woman's family may approve or disapprove. After approval, family members of the boy go with gifts and drinks (usually rum) to the girl's village or the family and pour a libation at the altar of the ancestors. The man then gives the woman gifts consisting of garments and household appliances. Outside the tribal areas, for example, in the coastal area, the marriage is done at any place. There are conditions attached to this. But it does not change the fact that the mutual parents must agree to the marriage, and a relative of both sides should be present at the wedding. Usually, a libation is also done.

Also, Menig (2008) mentioned various forms of relationships among the Saamakas which should lead to marriage. The name of these forms of relationships is associated with partner choice.

The first form, “lo mau” (literally “laying hands”), is uncommon nowadays, according to Menig. The parents of a boy ask permission from a pregnant woman and her husband - that if the baby is a girl-she may marry their son later. The girl, however, may refuse when she gets older. The second relationship form, “kiia mujee” (literally “raising a woman”), is when either a boy's family or the young man likes a girl. The two families discuss this, and if the girl's family gives their consent, agreements are then made. The girl is the boy's ”kiia mujee.” She may marry after the initiation of adulthood has occurred. Finally, there is “pidi mujee” (literally “asking for a woman”). The man proposes to an unmarried woman or with his permission, his family may propose to her family. If the woman likes the man, they can have a relationship, and it will be made public to mutual parents. The young man's family will ask for the girl's hand. Marriage can then take place after approval from both families.

Menig (2008) mentioned that the low maw and the kiia mujee do not occur anymore in the Pentecostal village Futunakaba. Nevertheless, in the Moravian Pokigoon, the ‘kiia mujee’ still occurs. Only the pidi mujee occurs everywhere and is widely considered the best form because one can choose a partner themselves.

Moreover, Menig (2008) stated that these relationship forms indicate that marriage of the Saamaka should be a relationship between the partners and the two families (or matrilineages, the bee). The author said that marriage is a common transition in the life of an adult, and therefore the Saamaka adult must have a partner. A single person who lost a partner due to death or divorce must remarry after the mourning period. De Beet and Sterman (1981) also emphasized marriage as an essential social institution that brings together two different kin groups. Recognition of the union by the kin groups is vital.

Adams (2003) indicated that in Saamaka culture, most marriages are traditional and not legal. During the time of the study, a form of marriage frequent along the Upper-Suriname river area was called the kija mujee, when a girl’s marriage is discussed among the two families, but she is still too young to be married. She is assigned a

partner and she must wait until both become adults. With the consent of the children concerned, both families can agree with a future engagement. The agreement can be canceled the moment the girl has become "koosu mujee" (ie., a girl who has received an embroidered skirt, called koosu or pangi) and decides not to become the wife of the boy or man. The boy can also indicate that he does not want the girl as his wife. But if both parties agree, then the marriage will take place. The family of the boy will take sopi (hard alcohol) to the family of the girl. One of the requirements that should be met after the marriage has taken place is that the paaka is given to the wife- a case containing goods, such as pangis, spoons, etc.

According to S. Price (984/1996), the man seals the marriage by giving the woman a basket. The gifts comprise mostly household products and food supplies, such as hammocks, plates, pots, spoons, cloths. The event is called “lai pakaa” (“loading the [marriage] basket”) (S. Price, 1984/1996, p. 70). Menig (2008, p.59) mentioned another marriage ceremony of the Saamaka called “tuwe daan” (literally “throwing liquor”) where the family of the man gives alcohol to the family of the woman and makes libations to ask the ancestors to protect the couple.

In sum, Maroons know various types of relationships that could lead to a marriage (Polimé, 2000; Menig, 2008). A crucial aspect of the wedding ceremony is that the man presents certain goods to his wife to be (S. Price, 1984/1992; Polimé, 2000; Adams, 2003). Another vital aspect of traditional marriage is that marriage is the relationship between the partners and the two families/bees (De Beet and Sterman, 1981; Menig, 2008). Thus, the family’s approval is necessary when one plans to get married (de Beet and Sterman, 1981; Menig, 2008). The man can have other love relationships besides his wives, according to Polimé. Menig indicated that a Saamaka adult must have a partner because it is part of adult life. A single person, therefore, must remarry after divorce or the death of a partner. Some rituals and customs that are practiced during the traditional marriage are the giving of the lai pakaa and the tuwe daan (S. Price, 1984/1996; Adams, 2003; Menig, 2008). The husband must give a basket consisting of household products and food supplies to the woman. The man also gives alcohol to the family, of which some are used as a libation to ask ancestors for protection of the couple.

Marriage (and other unions) is an essential factor that affects fertility because of the exposure to pregnancy. It seems that long periods of singleness are not encouraged because a single person must remarry soon after divorce or death of the partner (Menig, 2008). The duration of one's marriage status also has an impact on fertility.

The prevalence of traditional marriages and the number of rites may not appear as marriage in the western concept, and therefore it is sub-registered in the surveys that follow Eurocentric standards. But many of these surveys do register polygyny and child marriages.

The following describes the rights and obligations in traditional marriages.

Rights and obligation

Few studies mentioned that traditional marriages also have prescribed rights and obligations. Menig (2008, p.55) mentioned Saamaka couples have rights and obligations that are discussed during the marriage ceremony. The rights and duties of the man:

1. do not use physical violence against the woman,
2. expect him to keep regular contact with the 'bee' of the woman,
3. one expects the man's participation in family matters (such as marriage, death, birth, koosu ceremonies in the family),
4. is expected to be able to take care of his family,
5. expect respect for the elderly in the family and the village,
6. expecting them to have a lot of children,
7. clear the horticultural plot by the man and tilling of the horticultural plot by the woman.

Menig (2008) indicated that women have similar rights and duties. But points 1 and 4 do not apply to her. In contrast, the woman is expected to prepare the food for her husband and wash his clothes on time. Thus, the woman is supposed to do/manage the household. After the man has taken care of a plot, the woman will continue to sow and harvest the products. If one of the partners does not observe the rules, the marriage can terminate.

De Beet and Sterman (1981) also mentioned that the marriage contract among the Matawai includes duties and responsibilities.

Also, Vernon (2009) described some marriage obligations among Maroons. Husbands should take care of their wives, for instance, cutting open a horticultural plot, making a canoe, providing necessary resources such as soap and petroleum or luxury products such as sheets, beds, kitchen utensils, and a house. He also must take care of her when she is sick. The author further said that when the presence of the man is not necessary, he may choose how he wants to spend his time, since he is entitled to a life of his own. The woman, in turn, must be obedient to her husband and his brothers may punish her when she disobeys her husband. Even if the man stays away for a long time because of work, she must remain faithful.

Amoksi (2007) mentioned that the tradition to clear the horticultural plot, provide for housing and canoe has changed because of urbanization. In the city, a man that works at the government or other company does not have time to build, for instance, a house or canoe and therefore pays someone to do these things. People accept it, understanding that the man has a job and takes care of his wife. This would be less acceptable in the interior.

In terms of residence, Vernon (2009) stated that couples could live separately or together. Terborg (1999) mentioned that the dominant type of residence, her respondents reported to live separate from the partner from 2 weeks to several years. The Ndyuka/Okanisi have higher co-residence households compared to the Saamaka. Terborg stated that the Ndyuka adapted the modern family system where a man shares a household with his wife and children. Most men reported one official wife. Terborg (1999) also said that Ndyuka men are less involved in polygenic relationships but that this does not mean that they do not have multiple partners. According to Terborg (1999), many of these men combine a steady relationship with a casual partner (s).

Vernon (2009) also mentioned that with the Matawai, Saamaka, and Ndyuka, brothers and uncles ensure that a spouse sticks to the obligations of marriage. If the man fails to fulfill his duties, his family and adult children will help. Conversely, the man's family checks the woman's behavior and fidelity.

In short, a couple must adhere to specific obligations and rights within the marriage (de Beet and Sterman, 1981; Menig, 2008; Vernon 2009). The families observe that the rules are maintained (Vernon, 2009). However, the marriage can be ended if one of the partners does not keep the rules (Menig, 2008). If this is the case, one cannot separate easily.

The next section continues with the role of the family regarding the choice of a partner.

Family's role concerning partner choice

Some studies provided information about the family's involvement in the partner choice of their child or family member.

Menig (2008) claims one expects family protection if things go wrong in the relationship. Uncle and parents play an essential role in the selection of a partner. The uncle from the mother's side is respected and is responsible for preserving the family.
A father is involved in a child's partner choice when he has cared for them since birth. Parents and the uncle will try to reach a consensus in case one of them disagree with their child's partner choice. However, the role of the parents is crucial.

In the research of Menig (2008), the villages of Pokigoon and Futunaakaba, specifically indicate that the families of each partner must accept the choice. The woman's family will refuse if the man alone asks for the hand of the woman. Menig (2008) stated that without family, you are nowhere in the Saamaka community, particularly when it comes to deciding on a partner.

In another research, the authors also mentioned the family's role in partner choice of their children. Among the Maroon (as well as among the Hindustani population), parents are still in favor of controlling the partner choice of their children. In their study, "Parental control of mate choice and resistance against out-group mating in Suriname," Leckie, and Buunk (2017) mentioned that parents try to control partner choice of their children from an arranged marriage to subtle approval or disapproval. They looked at the differences between various ethnic groups in Suriname. The results indicated that Hindustanis are most in favor of parental control of mate choice and opposed against

out-group mating, followed by the Maroons. The sample was 500 participants aged 25 to 50 years; 100 were selected randomly per ethnic group from both sexes.

In sum, the family's role is crucial in partner choice (Menig, 2008; Leckie and Buunk, 2017). The reason why the family seems to play a role is when a relationship has problems. If there is a disagreement relating to the child's partner choice, then the family tries to reach a consensus. The parents' role in this is critical.

Changes in marriage customs in Christian villages

Menig (2008, p.58-62) revealed that marriage customs have changed in Christian Saamaka villages Pokigron and Futunaakaba. As seen, the first is Pentecostal and the latter Moravian.

At the traditional marriage, there are some ceremonies. At the introduction of both families, the family of the man gives alcohol to the family of the woman. The alcohol is sprinkled, and the gods, spirits, and ancestors are called to drink also. This is called the tuwe daan. In the second ceremony, the ancestors are asked to protect the couple and alcohol is used as a libation in the ancestor's altar (called faaka pau). This is therefore called the "tuwe daan a faaka pau." The third ceremony and ritual regarding the lai pakaa, is the party with family and villagers. Alcohol and other drinks are also offered to the gods and ancestors. The final ceremony and ritual are the "da mujee manu" ("giving the wife to the husband") and in it a libation is also done for the ancestors. The wife and husband receive a new name. The wife gets the name from a beloved aunt of the man, and the husband gets the name of a beloved uncle of the woman. The aunt guides the coupe on a walk through the village, and their new names are announced. They also greet other family members. The tuwe daan and the tuwe daan a faaka pau are not done in Futunaakaba, whereas in Pokigoon the first is but not the latter. In Pokigoon, they drink the alcohol but do not sprinkle it for the spirits and ancestors. However, the ceremony of the lai pakaa is done in both villages. The ceremony of the da mujee manu is done differently in Futunaakaba, where a family member of the woman speaks about the expectations concerning the man's

acceptance into the family. This last ritual does not include a libation for the ancestors in Futunaakaba, but in Pokigoon, it does.

Menig speaks of a combi marriage among evangelical Christians in Futunaakaba: this is a combination of traditional and Christian wedding and it excludes rituals that are in contradiction to the Bible. Menig mentioned that they choose to uphold the culture alongside Christianity. The author said that combined Christian and traditional weddings may be done as one ceremony or in sequence. In Pokigoon, the traditional marriage is like a trial marriage before the Christian marriage. Sometimes the Christian marriage occurs years after the traditional marriage in Pokigoon.
Menig also indicated that the marriage customs in Pokigoon and Futunaakaba also have modern and western influences. They have engagement and marriage using rings, marriage blessing in the church, receptions with wedding cake, and honeymoons.

In sum, marriage customs have changed in some Maroon villages with Christian influences. Christian Maroons may keep their traditions, although adapted, combined with Christian beliefs. Sometimes, they may choose for a wedding with western influences.

The section below describes another marriage institution of the Maroons, polygyny.

2.3.3.2.4 Polygyny

Several studies talked about the practice of polygyny among Maroons. Helman (1977) mentioned that polygyny occurs and that men are against monogamy because they will be without a woman for a long time when away from their only wife.

Also, S. Price (1984/1996) reported on the existence of polygyny among the Saamaka maroons. As did De Beet and Sterman (1981) for the Ndyuka and Saamaka.

However, these authors claim that among the Matawai Maroons, practically all marriages are monogamous. But in the past, polygyny was practiced among the Matawai. The church has contributed to stabilizing marriages and banished polygyny.

Also, De Groot (1983) noted that in the Nyjuka society, in most cases, a man has more than one wife. A man can have as many wives as he can support. And each of them, most often live in their maternal villages.

Terborg (2001) also noted that polygyny in the Saamaka community is strong. Nearly all men that had no steady partner at the time of her survey were involved in multiple casual relationships. On the contrary, all women said that they had a single husband, as Maroon culture rejects a woman with numerous partners. Terborg (1999) said that the whole village makes sure that the woman remains faithful. Social control over women's sexuality is less in urban areas in comparison to the interior. The author experienced during fieldwork in Paramaribo that many Maroon women, however, are restricted in their movement by their partners. The husband prohibits his wife from working and from having contact with family and friends. S. Price (1984/1996) talking about life in the interior, also indicated that a man might restrain his wife's social life.

Additionally, Adams (2003) mentioned that polygyny occurs in traditional communities and not dominantly "Christian" communities. Masiakiiki and Malobi had the highest percentage of men who stated that they have more than one wife. Approximately 63% of men in Masiakiiki and 71% of males in Malobi who are married said that they had more than one wife. While in Futunaakaba, only one male indicated to have more than one wife. On the contrary, none of the married male respondents in Pokigoon had more than one wife. The number of male respondents was small, i.e., 47 surveyed men, due to seasonal mobility/absenteeism of the men during the time of the research.

Also, Menig (2008) mentioned regarding polygyny, that Christians in Futunaakaba reported that they live according to the values and norms of the Bible, so they must adhere to one woman.

Terborg (1999) claims that there are differences in sexual patterns among Maroon men. Factors influencing these differences are male labor migration and religion. Most

Maroon men reported more than two steady partners. On the contrary, there is a larger number of partners living in co-residence in Ndyuka villages than in Saamaka villages. Terborg said that Ndyuka men in the East Suriname region are less mobile because they work in their home area. Therefore, the separation periods between partners are shorter than among the Saamaka partners.

In brief, polygyny is practiced, but not polyandry (Helman, 1977; S. Price, 1984/1996; De Beet and Sterman, 1981; De Groot, 1983; Terborg, 2001; Adams, 2003). De Beet and Sterman (1981), Adams (2003), and Menig's (2008) findings indicate that not all Maroon societies practice polygyny nowadays because of the influence of Christian values. However, even in rigorous Pentecostal communities such as Futunaakaba, there are still few cases of men married to multiple women. Inversely,
De Beet and Sterman's findings indicate polygyny has been expelled in the Matawai because the Moravian church prohibits it.

A man involved in a polygynous relationship must treat all his wives equally, including sexually. S. Price (1984/1996) mentioned that the man must regularly sleep with each woman for similar nights as circumstances permit if more than one woman is in his village.

Polygyny affects fertility since a man has children with more than one wife. Women may be less exposed to the risk of being pregnant because of less frequent intercourse.

The following section shows that the practice of polygyny has social and economic conditions that men must obey.

Status and conditions polygyny

A few studies indicated that polygyny gives prestige but is subject to conditions.

Although polygyny provides status, Helman (1977) said that it is an economic burden to have multiple wives.

Also, De Groot (1983) mentioned that the man is supposed to provide each wife with a hut, a boat, domestic articles, and at regular periods, clear the horticultural plot. The

latter is necessary because wives are responsible for the growing and harvesting of food crops.

S. Price (1984/1996) underlined that according to Saamaka ideology, husbands must give all their wives equal treatment. They believe that there is no main wife. Whenever a man gives out presents, such as cooking utensils, he must give the same amount to each wife. If he has meat or fish, he should provide an equal portion to each wife. When more wives are in the village, he should spend the same number of nights with each one.

Likewise, Van Wetering (1966) explained that most Ndjuka men want a polygamous marriage because the multiple marriages give status. A young man who has a regular job and therefore earns well by local standards will seek a second wife. But this comes with economic obligations. A man must give a house, a boat, and a paddle to each wife, and must also clear a plot for her every year. Moreover, he must provide them all with money to buy the necessary products such as salt, soap, and petroleum. Van Wetering further stated that in addition to considerations of social prestige, there are practical reasons why a man may want a second wife. Men who want to be taken care of all the time would wish a second wife because women often prefer to live in the mother's village after their marriage. Besides, a woman is not allowed to cook for her husband during menstruation. Another reason is that a woman must abstain from sexual intercourse for three months after childbirth.

In short, polygyny gives the man social status, but there are social and economic obligations, as mentioned by Helman, de Groot, S. Price, and van Wetering. The latter also added practical reasons why men want to be in a polygynous marriage.

The next section discusses divorce among Maroons.

2.3.3.2.5 Divorce

Studies indicate that men and women can initiate a divorce. There are no sanctions for divorce. Any partner may break up the marriage at any time when they like.

Hurault (1959) said that divorce is allowed among the Boni, and that unions are not stable. Many women get divorced four to five times in their lifetime.

In addition, R. Price (1974) noted that the Saamaka know different kinds of divorce. The first is that a woman initiates the divorce. The second is divorce by mutual agreement. The author mentioned that the woman should remain single for about a year, even if there was no infidelity. This is done to avoid moral condemnation and accusation of prior adultery. The man may divorce and marry when he wants. R. Price further explained that it is uncommon for a woman to divorce because the demographic circumstances make it challenging to find a husband again. He claims most women prefer a terrible marriage to no marriage at all. The reason is that women are dependent on their husbands for providing goods and clearing the horticultural plots. Most likely, changes in patterns of divorce have occurred during the past century.

Additionally, Green (1974) mentioned that divorce and remarriage frequently occur in Matawai. Bees of both partners are informed about the divorce. The author indicated that a woman might divorce her husband if he stays away too long and, as a result, is not able to repair her hut or provide her with the necessities. Adultery is also a reason for divorce.

Helman (1977) also confirmed that divorce occurs among Maroons. The woman is obligated to be faithful, but the man is not. After a divorce, the woman must remain unmarried for a year. The man can marry again immediately.

Furthermore, S. Price (1984/1996) stated that most women have several marriages in their lifetime. Some end with the death of a husband, while many end with divorce. Occasionally a woman might spend her whole life with a single husband. Another possibility is that a couple may divorce and then remarry later, sometimes having different partners in the interim. S. Price also noted that, while many men prefer having multiple wives, some choose to be monogamists, and one given reason is that they cannot handle jealous co-wives.

Finally, Terborg (1999) said that a woman could end a relationship with a man when he is unfaithful, or his financial care for his family is not sufficient.

In short, all authors reported that divorce occurs among Maroons. The high frequency of divorce is regular. Women, however, should remain single for a year after a divorce, as indicated by R. Price (1974) and Helman (1977). Reasons for divorce vary. Despite frequent divorce and remarriage, S. Price (1984/1996) mentioned that some couples stay their entire life together. Another aspect is brought forward by Green (1974), who indicated that the couple should inform the family about the divorce.

The possibility of separation, the frequency of divorce, and remarriage can also affect reproductive behavior. The following section will give some insight into the sexual behavior of Maroons.

2.3.4 Sexual behavior

Several studies showed that Maroons start early in life with sexual activity compared to women of other ethnic groups (Jagdeo, 1993). They, however, also practice sexual abstinence at various periods in their lifetime, specifically the women.

2.3.4.1 Age at sexual activity

Studies showed that sexual activity starts early in life in Maroon societies.

Jagdeo (1993) surveyed women aged 15-44 in the various ethnic groups and reported the following results.
The mean age of first intercourse among Maroon women is 15.3 years; for Amerindians 16.2; Creole 17.3; Hindustani 18.6; Mixed 17.5; and Javanese 17.3.
The proportion of sexually active “single” Maroon women was 52%. Almost 81% of Maroon females aged 15-19 have reported that they are sexually active, and in the

age group 20-24, this is 100%. For the adolescents (15-19) of other ethnic groups, the proportions who were sexually active were Creoles 47%, Hindustani 23%, Javanese 35%, Mixed 27%, and Amerindians 53% (Jagdeo, 1993: 20-22).

Similarly, Adams (2003) reported low ages at the first sexual encounter in four Saamaka villages. She noted that the median age at initiation of sexual activity was 12 years for Malobi, 13 for Masiakiiki, and 15 for both Futunaakaba and Pokigoon. Most women in Futunaakaba and Pokigoon had a higher level of education and are Christians.

In summary, Maroons have a younger age at sexual encounters compared to other ethnic groups in Suriname. Adams (2003) stated that most likely education and Christianity might explain internal differences in the sexual behavior of Saamaka Maroons. However, these studies were conducted some decades ago. The present study will describe recent developments in their sexual behavior by looking at their age at first sexual intercourse. The findings of this study will show if Maroons have similar sexual behavior or whether changes have occurred.

The next section discusses the sexual abstinence practices maintained by Maroons.

2.3.4.2 Periods of Sexual Abstinence

Maroons abstain from sexual contact in various moments of their life. Sexual abstinence is practiced during menstruation, the last three weeks of pregnancy, after childbirth, and mourning period (Polimé, 2000). The duration to abstain from sexual intercourse after birth varies. The prescribed period is three months, but in some villages, women abstain from sex for a more extended period.

De Beet and Sterman (1978) noted a period of three to four months postpartum abstinence among the Matawai Maroons. The authors stated, however, that the distribution of birth intervals according to length (i.e., 14 months) reveals that Matawai do not always abide by this rule.

Moreover, Polimé (2000) mentioned that the Maroons practice not only sexual abstinence after childbirth but also during other periods. The author indicated that Maroon couples refrain from sexual and physical contact during the period of menstruation; three weeks before childbirth; during the lactation period; and the mourning period. Maroons believe that complications can occur during delivery or that the child can be born with congenital disabilities if the mother has sexual intercourse in the last weeks of her pregnancy. However, frequent sexual intercourse is necessary for the first six months of pregnancy for the further development of the child. Also, in the first three months after birth, one avoids having sexual contacts because it is considered bad for the woman's health.

Also, Adams (2003) stated that Saamaka Maroon culture demands that both men and women abstain from sexual intercourse for three months after pregnancy. However, they believe that during pregnancy, the couple should have sexual intercourse frequently to make the baby grow. Adams reported that almost a quarter of the females resumed sexual intercourse before the traditional 12 weeks. It is noteworthy that in Pokigoon, most women abstained from sex for 12 weeks or longer. The average period of abstinence in Pokigoon was the longest (19.6 weeks), and Futunaakaba had the shortest (9.25 weeks). The median length of 12 weeks of abstinence in all the villages, except Futunaakaba, shows that the traditional injunction is still strong.

These periods of abstinence might affect the exposure to pregnancy and, consequently, the number of children that a Maroon woman could have in her reproductive life.
This information can help to understand their reproductive behavior and thereby their level of fertility.

The following section will highlight the other postpartum practices of this population.

2.3.5 Post-partum practices

Few studies reported on the postpartum practices of Maroons.

2.3.5.1 Maternity care

Maroon women have various rituals after childbirth. They wash themselves with hot herbal baths. Special herbs are cooked and placed in a pot on which the woman sits, to help to tighten her uterus and vagina. The belly is tied with a cloth to flatten it after the pregnancy. Another cloth is used as a sanitary napkin to prevent her from getting cold. The woman must drink an herbal mixture with bitter taste which is considered suitable for both mother and infant. Men and women also practice postpartum sexual abstinence. These rituals mostly last for three months.

Polimé (2000) said that the woman must wash with hot herbs for three months. Commonly, it can take three and a half months with the first child. The woman does the washing twice a day. An experienced woman from the family guides her or washes her in the early weeks, maybe an aunt or a sister. Women also have vaginal steam baths[35]. People assume that with this treatment, the uterus of the woman contracts better. All herbal treatments are applied twice daily to keep warm. These treatments are used both with the first child and the second and lasts at least a week longer for a second child.

Polimé (2000) further mentioned that a woman who has recently given birth wears a kamisa. It is not the kamisa that the man wears, but a cloth that is attached to a cotton thread that she ties to her waist. The woman wears this cloth for three to four months. The primary function of this cloth is a sanitary napkin in the first few weeks. Secondly, the woman wears this cloth so that she does not catch a cold (“koo kisi en”). People believe that the puerperal woman is very susceptible to the cold which may penetrate through almost all parts of the body, particularly the genitals. The various hot herbal treatments also intend to prevent the cold. Polimé said that people are cautious with

[35] Van Andel et al., (2008) stated that the vaginal herbal baths were most likely common among the first African women, who were brought to Suriname as slaves.

this treatment because when the procedure goes wrong, the woman becomes ill. This author also mentioned women's use of bita, a drink with special herbs and a bitter taste that is cooked in water. The baby and the mother benefit from it because the bitter drink stimulates good breast milk. He also revealed that the woman gets back her old figure quickly, by using the tei bee ("tie belly") treatment, which takes an average of two months. A specialist wraps the woman's belly tightly to avoid it from becoming "thick." The treatment takes place after bathing -during dinner, the woman should not loose the cloth, only when she goes to sleep. The woman and her family may be shamed if people conclude that she has not used the procedure right, and it may be remarked that the woman was poorly cared for by her close relatives. Polimé concluded that after an average of three months, the puerperal woman stops washing with hot herbal water, and will begin bathing with cold water again.

Another postpartum practice will be described below.

2.3.5.2 Breastfeeding

Studies show that Maroon women breastfeed their infants for extended periods (de Beet and Sterman, 1978; Adams, 2003). Surveys indicate that high percentages of Maroon women practice breastfeeding. Reasons given in six focus group discussions are that breastfeeding produces healthy children, and women stop breastfeeding when the child is physically fit (Adams, 2003).

De Beet and Sterman (1978) mentioned that Matawai women usually have a lactation period of about fourteen months. Breastfeeding continues as long as the child cannot walk great distances (i.e., from 11 to 14 months), and this is when people expect the mother to become pregnant again. In addition to breastfeeding, the baby drinks water. After about four months, the baby begins receiving other food, such as manioc flour diluted with water; at weaning, the meal consists of soft-cooked rice with water.

Polimé also indicated that Ndyuka women practice a long period of breastfeeding. The lactation among the Ndyukas used to last one to two years but now decreased to six

months, when many women turn to bottle feeding. If the woman becomes pregnant during the lactation period, she must stop breastfeeding because Maroons think that it could otherwise make the child sick with diarrhea or a rash. Another effect is that it may take longer for a child to walk.

Similarly, Adams (2003) noted that the length of breastfeeding among women in all villages is long. The mean length varies from 12.7 months in Malobi, 14.5 in Masiakiiki, 15.9 in Futunaakaba, and 6.5 months in Pokigoon. Overall, up to 76% of the women gave breast milk to their babies for between 12 months and 18 months. Women breastfeed until the child is physically strong, and then they stop. It means that the child can walk, eat other food, and has teeth or developed muscles. Thus, the child is independent of their mother. The second reason for breastfeeding varies among the villages: to produce healthy children (Futunaakaba and Pokigoon) and to prevent undernourishment (Masiakiiki).

As can be seen, a Maroon mother has various postpartum practices to follow, postpartum abstinence. She needs to take physical care of herself by observing certain rituals such as taking steam baths, vaginal steam baths, drinking herbal beverages, binding her abdomen. If she does not, her social environment will make remarks, which indicates that there is social control. Furthermore, it is also essential that she breastfeeds her child. The reasons given by Adams (2003) can clarify why these women are breastfeeding for an extended period. Maroon women mainly think about the health of the child but also of their own.
This information is essential to this study because postpartum practices might have an impact on birth intervals. Depending on the duration of these practices, it may lengthen birth intervals.

The following section will discuss the use of contraceptives, factors of contraceptive use, decision making, and changing attitudes concerning contraception.

2.3.6 Contraception issues

2.3.6.1 Contraceptive use

Several studies have mentioned that contraceptive use is low among Maroons, even though they are also knowledgeable about methods to prevent pregnancy.

Price (1984/1996) stated that the women did not use birth control in the 1960s and 1970s. Hurault (1959) mentioned that the Boni did not practice fertility control in the 1950s, and De Beet and Sterman (1981) indicated that the Matawai did not do it in the 1970s.

Jagdeo (1993), though, pointed out that approximately 15% of Maroon women in union used contraceptives at the time of the survey. This percentage should be compared with the proportion of users in other ethnic groups: Javanese and Mixed 60%, Creoles 56%, Hindustanis 51%, and Amerindians 29%.

Adams (2003) also mentioned the low contraceptive use among females in four Saamaka villages in 2002. The use of a contraceptive method is seen by women to be harmful to their health, sexuality, and reproduction. Both men and women mentioned cultural and modern ways to avoid pregnancy, but most of them did not believe in practicing fertility control, especially women. Well-known methods were the pill, condoms, injectables, and herbal drinks. Less than 6 percent of women are users, while 28% of men use a contraceptive method. Overall, less than six percent of women use contraceptives Futunaakaba has absolutely no users of contraceptives. Pokigoon females (17%) and males (55%), however, reported a higher percentage of users.

Goede (2011) underlined the low contraceptive use of Maroon women in Paramaribo. The research was conducted at the health clinics in Latour and Pontbuiten, areas where there is a concentration of Maroons. Research was done among 45 Maroon women between the ages of 16 and 46 about their perception regarding antenatal care. The author has a section on the use of contraceptives and unplanned pregnancy. The findings showed that there is low contraceptive use among these women. Most (53.3%)

have never used the pill, and 17.8% did not use it before the current pregnancy but have used it. 53.3% of women indicate that their partner did not use a condom for pregnancy. The main reason for this is “he did not want to.” Other 31.1% use the condom occasionally.

Also, Adams (2003) reported that male respondents in Masiakriki and Pokigron mentioned the existence of cultural methods used by women to avoid getting pregnant. Condoms, the pill, and injectables are known modern methods among these men. There seemed to be no knowledge of the existence of cultural methods used by men to avoid impregnating a woman. However, according to de Beet and Sterman, (1978), Matawai men mentioned that men could drink medicine[36] to prevent pregnancy of women with whom they have extra-marital relations.

Further, in the study of Goede (2011), respondents talked about what they could do to prevent another pregnancy. Some mentioned the injectable and the pill. In other instances, women first use home remedies before using western contraceptives. Bad experiences also make women decide to use home remedies such as “redi katoen en soda water” (red cotton plant and soda water). The woman drinks the home remedy before she has sexual intercourse.

Van Andel et al. (2008) did fieldwork between 2005 and 2007. They collected plants that are used for genital steam baths and interviewed 140 women about the use of these steam baths. They mentioned that certain vaginal herbal steam baths could stop menstruation. These steam baths are used by women who have a new partner or must attend a special feast or ceremony, but their menstruation prevents them from doing so.

On the other hand, Vernon (2018) indicated that wives use contraceptive pills to delay their period if it fell during the short reunion with their husband or a festive ceremony. The husbands of these wives return home twice yearly.

[36] The Amerindians in Suriname know an herbal drink for the man to activate and strengthen the sperm cells. It is believed that sometimes the sperm cells are not strong enough for fertilization to take place. Therefore, when a woman wants to become pregnant, also the partner may get the drink. (Aveloo, dwtonline.com, 10 May 2020)

In brief, contraceptive use among Maroon women is low, despite the knowledge about cultural and modern methods for preventing pregnancy. Adams' research consisted of male and female participants who reported the various techniques they knew, including the existence of herbal drinks to avoid pregnancies. Goede's study showed that women could use home remedies to prevent pregnancy, often trying it before they use a 'western' contraceptive method. De Beet and Sterman also showed an interesting point whereby Matawai men seem to be aware of herbal medicine that men can use to avoid getting the women pregnant. The Saamaka men that Adams interviewed were not aware of the existence of such a male contraceptive method.
Adams's study revealed that people find contraceptives to be harmful to their health, sexuality, and reproduction. This belief can be a possible explanation for their low use to have an impact on their contraceptive behavior.
As important as they are, no studies about the effects of using cultural contraceptive methods among the Maroon population were found at the moment of this writing.

The next section will mention possible factors/reasons determining contraception practice among the Maroons.

2.3.6.2 Factors preventing contraceptive use

Terborg (1999) stated that the use of contraceptives among Maroon men and women is low. Both men and women value fertility in Maroon culture so a significant motive to have sex is procreation. Terborg stated that careful consideration is necessary for this strong association of sex with reproduction because it is an obstacle in changing behavior. The more children a man has, the more social status he gains. According to this author, Maroons have the lowest percentage of contraceptive use of all the different ethnic groups in Suriname, particularly among men. She also claimed that in most of the steady relationships use of condoms as a contraceptive is non-existent because of the wish for (more) children; and emphasized that Maroons believe that the process of childbearing cannot be stopped- the children a woman will get in her life are already in her womb.

Another point Terborg made is that young women, especially schoolgirls, acknowledged the necessity of birth control. Their main argument was the wish to finish school. In practice, however, not one of the surveyed young women was using a contraceptive. Some said that they had tried the pill, but that they stopped because of the adverse side effects. Others stated that they heard many bad things about the contraceptive pill that they were afraid to use it. There is less resistance against birth control among young women than among older women. In the older age group, notions about the negative effect the pill has on the woman's body, especially the uterus, are very persistent. The author therefore argued that the main factors that contribute to the low use of contraceptives are determined cultural notions concerning fertility, birth control, femininity, and masculinity. In addition to this, there is a lack of knowledge about contraceptives. Because procreation is such a significant motive for sex, both males and females will likely be sensitive for prevention messages with stress on the harmful effects of STDs-HIV infection on procreation and the unborn child.

Terborg (1999) mentioned that men overall are firmly against the use of contraceptives. Although some men stated that they disapprove of family planning, they understand why women want to limit the number of children. Most men, however, irrespective of their age, persist in their wish for many children. Men also associate contraceptive use with possible infidelity of the wife during their absence. Yet another factor mentioned by Terborg is the negative attitude against the condom. The author indicated that many Maroons believe that one becomes sick when the sperm is not used for procreation. The sperm that stays in the condom is a waste. "Sperm symbolizes life, fertility, which in fact cannot be wasted" (Terborg, 1999, p.51).

Adams (2003) showed how Saamaka Maroons view contraceptive use. In this study, two focus group discussions among men and six focus group discussions among women were conducted. Well-known methods were the pill, condom, injectable, and herbal drinks to prevent pregnancy and prevent STI in some cases. Herbal drinks were also known to abort. Participants claimed that "evil persons" would use contraceptives, and that the use of a method to avoid pregnancy also thwarts the work of God. Although some women appeared to be aware that the use of condoms protects someone from STI's and HIV-AIDS, they were not willing to use a method to

avoid getting pregnant. Futunaakaba females, however, did not find it necessary to use a condom because they are Christians. They knew the existence of herbal drinks, but they did not use it either. Men who had lovers used condoms, they said.

The research findings of Koole (2010) said that the reproduction and expansion of the lo (clan) are esteemed. The culture does not prohibit contraceptives, but Maroons see it as an obstacle to have many children. People in Guyaba, the large, non-Christian Saamaka village where this research was conducted, know the condom as protection, but they rarely use it because it prevents pregnancy. Koole interviewed 72 adolescents, between ages 10 and 19: 50 young women and 22 young men. The author also mentioned that children get sexual education in school. Contraceptives can be obtained free of charge at the health clinic, but schoolchildren reported that they could not go to the health clinic without the knowledge of their parents or caretakers.

Goede (2011) said some women resist contraceptive use because of negative experiences, fear caused by stories from other women, fear of forgetting when to take the pill. Also, partners may resist using a condom. The resistance in men is closely related to the widespread view that you do not use a condom with the partner. A condom is viewed as protection against diseases and not as a method for pregnancy prevention. Sometimes women also share the same view as men.

The author furthermore mentioned that it is considered essential for Maroon women to have at least three children. Most women in this study stated that Maroon women gain prestige when having more children, especially from other Maroon women. Children are also a guarantee of care during old age. Her mother and other women in her environment stimulate these ideas.

In short, we see that the desire to have many children; firm resistance of men; fear for side effects; and lack of knowledge contribute to low contraceptive use. The question is: how can there be a lack of knowledge if people can report the names of contraceptives? They most likely know the names, but they are not aware of the proper functioning of these contraceptives, likely because they have no desire in using them or are strongly advised not to. In the studies of Goede and Terborg, we can conclude that social influence affects the contraceptive behavior of Maroon women. They hear

about the adverse effects from others. The ideology of Maroons concerning procreation is fundamental due to their wish for more children. Adams also confirmed that Maroon women in the four villages did not want to use a method to prevent pregnancy. Therefore, they do not use contraceptives. Some respondents also believe that people who use contraceptive methods are evil. Koole clarified Terborg's statement about procreation. Koole pointed towards the importance of reproduction for the survival of the clan.

Children are, therefore, important to the group and the individual. On the one hand, children are essential for the survival of the clan. Children are necessary for the individual because of social status and provision for old age. And the social environment motivates having children.
Thus, these factors preventing contraceptive use help explain the low usage. What is interesting here that they see the usefulness of using contraceptives, but the belief in procreation prevails.

However, some findings show that women specifically are considering using contraceptives.

2.3.6.3 Changing attitudes toward contraceptive use

Terborg's study on sexual behavior and sexually transmitted diseases in the interior also gives some insight into the changing attitude of Maroons in the interior. This author claimed that a small number of men agreed with reducing the number of children, mainly because of the increased costs of living. Difficult economic situations and poverty are the leading causes of women's wish to have fewer children. Terborg mentioned that many women were considering using contraceptives, and another important reason is the risk of complications during birth. Especially in remote villages, sometimes complications occur during delivery, resulting in maternal death. Many women also complained about the irresponsible behavior of men who want children but not willing to take care of them. Several female respondents said that they use a contraceptive, but they keep it a secret for their husbands and mothers.

Terborg furthermore indicated that the overall attitude towards birth control is changing. Young women want fewer children than their parents; they wanted 2 to 4 children. In many villages, participants in the research said that in the old days, women never used anything to prevent birth. Nowadays, the use of contraceptives has increased. In some relationships, the number of children has become an issue of discussion.

As indicated by Terborg's study, financial and health reasons impact people's motives for having less children.

These developments can bring about a change in the contraceptive attitude and behavior of some men and women. The question is: can women decide for themselves to use a contraceptive, although most men resist the use of it? The following section deals with decision making regarding contraceptives.

2.3.6.4 Decision making contraceptive use

The research of Goede (2011) gives some insight into who decides if contraception can be used in a relationship. She indicated that most women know how to prevent getting pregnant, but there are factors that prevent them from using a contraceptive method. Some determine if contraceptives will be used and which method, they use to prevent pregnancy, while in other cases, the partner does. The woman is likely to accept this, but not always.

When 'others' influence decisions concerning contraceptives, women may decide not to use the method even though they would like. The partner is the decision-maker, so some women are dependent on the decision of their partners.

2.3.6.5 Unintended pregnancies

The survey of Goede (2011) showed that most Maroon women do not plan their pregnancy. She reported that most women (together with their partner) decide to keep the pregnancy. On the other hand, the author stated that concerning unintended

pregnancies, most Maroon women in the first instance try to end their pregnancy with a home remedy or ask the medical doctor. Reasons for choosing not to abort unwanted pregnancies include a lack of finances, and the belief that God decides how many children He wants to give them. The author mentioned that women agree with their partner's decision to keep the pregnancy out of fear that the partner will end the relationship**.**

When a woman does not plan her pregnancy, and she is sexually active and has an unintended pregnancy, it indicates that she does not use a method to prevent the pregnancy or it failed. If a woman is sexually active and does not plan her pregnancies, does it mean that it is an unwanted pregnancy?

Maybe the pronatalist views mentioned in some studies (Terborg, 1999; Koole, 2010) give insight into why women have unplanned pregnancies.

On the contrary, some respondents in Paramaribo want to do an abortion (Goede, 2011). Does this indicate change, or if they are not using contraception, one should expect a pregnancy? Why then not using a contraceptive method? Maybe fear of adverse side effects is an explanation. So, this points to a lack of knowledge. Adams' research (2003) indicated that Saamaka Maroons in the interior are against abortion. Does it suggest a change in the pronatalist view? Or is this attributed to city life urbanization?

The next section deals with the impact of urbanization on Maroon women that moved to the urban region in Suriname.

2.3.7 Urbanization

Several authors mentioned the impact of urbanization on the lives of the Maroon population in general, and particularly among women. These changes also affect the villages in the interior.

2.3.7.1 Developments in the Traditional Maroon territories in the Interior

Several publications provide information regarding developments in tribal territories of the Maroon population.

Terborg (1999) described some of the changes that took place in the interior. The author talked about the decrease in the family's social control over the sexual behavior of young people. Also, women travel alone nowadays whereas in previous days it was not possible. Currently, men are neglecting to take care of their children, but in the past, it was a shame when a man did not take care of his family because it could harm his reputation. Some women are involved in trade, and a few even possess their boat and outboard motor. These women sell goods in the gold diggers camps or on the markets in French-Guiana. Most Maroon men work for a company or as a small entrepreneur in the gold- and wood sector.

Another author, Malmberg-Guicherit (2001), looked at changes that occurred in gender relations in the District Brokopondo[37] in the Klaaskreek resort, as the result of contact with the larger Surinamese society. The author cited that monogamy has increased. According to Malmberg-Guicherit, men use monogamy as a strategy to cope with the current economic situation as they cannot take care of multiple wives with their current income. A woman in the Saamaka society cannot cook for her husband when she is menstruating, and if there are no co-wives, the man must do this task, something uncommon in the past for many men in Saamaka society consider domestic chores below their dignity. The author acknowledged that there are men who wash dishes, wash clothes, cook, or help their wife to run an errand, but it does not occur often. Polygyny is also criticized as irresponsible by women, particularly during an economic crisis. Women are also becoming more aware of sexually transmitted diseases and AIDS. Malmberg-Guicherit (2001) also noted that more than before, women have responsibility for their families as men move away and are more active in the money economy. They must take care of their families. Thus, they are entering the labor

[37] District Brokopondo is part of the interior of Suriname. The district is between the forest and the city but is accessible by car (see map of Suriname, chapter 1-Introduction)

market in their village as well as in the city. Women now show more interest in setting up their own business - there are now female bakers, shop owners, for example. The author said that Maroon women in the district of Brokopondo had had some opportunities in recent years to become more independent through the access of further education, seminars, workshops, training, positions of power and decision making, and the development of micro-entrepreneurship. There are even women from the district who now participate in national politics or hold administrative positions.

Koole (2010) reported the developments that occurred in the largest Saamaka village Guyaba, where western culture is penetrating. The village became more accessible, and goods and products are now used, such as outboard engines, televisions, refrigerators, DVDs are now more common. More people from different cultures come to the village, and many locals live and work in the city or elsewhere, a practice that hardly occurred in the past. These developments have an impact on the demographics and economic situation. Parents now consider it essential for both girls and boys to go to school. In the past, according to tradition, girls did not, because they had to help their mothers.

Another development is that some children continue their education in Paramaribo since the village only has an elementary school. In most cases, the schoolchildren go back to the village with the holidays. People see the opportunity given to children to continue their education in the city as an essential development. However, very few children have this chance because of lack of caretakers and money.

Koole (2010, p.60) stated there are changes in some traditions. Previously, girls received the pangi at the age of about sixteen. Older people now complain that this tradition is changing because girls get the pangi at an earlier age. The reason why the pangi is offered at a younger age is that the girls start early with sexual activity.

Koole (2010) quoted Landveld, E (2005), who said that parents still see children as an investment in the future. Due to the lack of social services for the Maroons, families wanted many children as the parents' old-age provision. It is, therefore, still relevant that a woman has many children. In her research, none of the 72 adolescents in the research wanted fewer than five children.

She further noted that there is also a change in the perception of women regarding polygynous marriages. Some women from the research indicate that a change should occur because the man can spread diseases that he got from one of the wives.

To summarize, there are some changes taking place in the traditional territories of the Maroons. People have more access to industrialized goods and women are becoming more independent and entrepreneurial (Terborg, 1999). The institution of polygyny is subject to change. Some men in Brokopondo (Klaaskreek resort) are now monogamous partly because of the economic situation in the country (Malmberg-Guicherit, 2001).
Another change in tradition is that in Guyaba, girls receive the pangi at an earlier age because they are now sexually active soooner (Koole, 2010). In the section regarding urbanization, we will see that girls receive the pangi at a later age because of education in the city. So, here we see two opposite developments regarding this ritual. We see that despite developments in Guyaba, Maroons still wish for children. The adolescents in Guyaba do not want fewer than five children.
In the long run, these events will affect the fertility level of Maroons in Suriname.

The following section describes the migration periods of the Maroons.

2.3.7.2 Migration of the Maroon population to urban areas

Several studies described the various stages of mobility and factors that have encouraged or forced these movements of the Maroons in Suriname.

Goossens (2007) discussed the migration of Saamakas to Paramaribo and their motives. The author researched in 2006 in Masiakiiki and Paramaribo and presented two migrant flows towards the city: the stream that lasted until the Civil War (19861992); and the one that started afterward. The migration flow before the war partly consisted of young people who had finished their primary school in the village of origin and moved to Paramaribo to continue their education there. The flow of migrants from the Civil War initially consisted of refugees. A vital pull factor after the Civil War was the education that is present in the

city. The recent migration is voluntary and consists mainly of people who are searching for work and better living conditions. The city is the location where people can earn an income, something that is hardly possible in the village.

Amoksi's (2009) description is more extensive because it described the migration from the early years of existence of the Maroon communities. She said that the Maroon communities were never completely isolated from city life, with which they had regular contact with the city because of trade and work. Describing a migration pattern common among the Saamaka and Matawai, the author lists push factors that contributed to the movement of Maroon women: the movement of the men to the city; the construction of the Afobaka hydro-electric dam; and the Civil war. Concerning the migration of men, employment opportunities were increasingly available after World War II, resulting in the increased mobility of Maroons to the city to earn money as a laborer. Many of these men no longer regularly returned to their village for an extended period, and others moved to Paramaribo with their families in the search for work, while other still went to French Guiana, the Netherlands, or the United States and left their families behind. As a result, during the second half of the 1960s, mainly women were left in the villages. Mostly Saamaka young Maroon males who went to the city for further education married educated girls outside the tribe, motivating Saamaka girls to go to the town to continue learning. From the 1970s on, more men who had a permanent job settled with their families in the city. Another factor was the construction of the Afobaka hydro-electric dam, in which thousands of Maroons found work. After completion of the dam, many were dismissed, however. The dam also forced people to move to new settlements because dozens of villages were flooded. This had a significant impact on the inhabitants' living conditions, who lost their houses, horticultural plots, and other places that had religious, cultural, and historical value to them. They were placed in transmigration villages built by the government, but the houses did not meet their expectations and could not provide for their existence. The Civil War was also a factor that forced Maroons to leave their tribal territories. It influenced the urbanization of the Maroon women. As a result, thousands of Maroons fled to the city or to French Guiana.

Other pull factors that attracted the Maroon women to move to the city were: the entry of politics in the interior; employment; and education. In 1948, Suriname introduced the

general right to vote. Political parties promised the people in the interior, where unemployment was quite intense, to help them get to work after the election. Therefore, the number of Maroons that moved to the city increased and had a more permanent character. Some took their families, including women, with them so that their children could enjoy better education.

Bilby (1990) mentioned that with the construction of the space center in the 1960s in Kourou, Maroons also found employment and migrated to French-Guiana.

Also, Van Stripriaan (2009) gave some insights into the mobility patterns since the time of the marronage (from 1652 to 1863, when slavery ended). He stated that there was always migration among Maroons: through marronage, war, mutual conflicts, socioeconomic development, and population growth. For example, following de Beet and Price, the author stated that there were ten Saamaka villages involved in peace treaties in 1762. Nowadays, Saamaka society consists of 70 villages spread across the interior. Van Stripriaan (2009), like Amoksi (2009), also said that there was always constant contact with the city through trade and meetings with traditional Maroon authorities and the colonial Government in the city.

Further, van Stripriaan (2009) mentioned that before the construction of the hydroelectric dam, the Maroons migrated on their own initiative. After the dam in 1963, 27 Saamaka and Ndyuka villages flooded as a consequent 5,000 to 6,000 Maroons had to leave their residential area. The migration continued from the transmigration villages. Maroons moved to the urban centers because of a lack of economic prospects in transmigration villages and interior. Maroons, mainly men, need to earn money to buy the household goods and other necessities so that he can have a wife. Lack of education was also an essential factor in moving to the city.

Van Stripriaan (2009) also noted that after the dam, the Civil War caused a massive flow of refugees. The author said that most Maroons no longer live in their traditional territory. In the past, only the men left, but nowadays, women who are the backbone of village society also migrate. The author pointed out the new developments that take place in many villages, where there are houses of stones (and not only the traditional wooden huts), and, mobile phones, and satellite dishes. Many Maroons are active in the gold sector. There is a lot of travel to and from the interior between Paramaribo,

French-Guiana, and the Netherlands. Van Stripriaan also indicated that in the city, new Maroon dynamics have emerged; they are now spreading to new economic sectors and politics.

As shown above, some overall motives are similar in all periods of migration. Maroons moved for reasons as earning an income, improvement of life, better education opportunities (Goossen, 2007; van Stripriaan, 2009; Amoksi, 2009). Men needed to make money because the gifts of household items are required if one wants to marry, as Goossen (2007) and van Stripriaan (2009) noted. Other motives, however, were only factors in a given period, such as the flooding caused by the dam and the Civil War. All authors indicated different migration flows. Two forms of movements are registered: voluntary and forced migration. In a way, mobility of the Maroons has also brought about development in the villages, as mentioned by Van Stripriaan. Finally, Maroons who live in the city have experienced changes. For instance, some are now active in national politics. As seen above, a motive for migration for Maroons was education. Urban areas offer further education opportunities to its citizens.

The next section will focus on the urbanization of Maroon women.

2.3.7.3 Socio-economic changes in Maroon women's lives

Studies reported on social and economic changes in women's lives.

Amoksi (2009) stated as one of the motives for the Maroon women to urbanize was the fact that there was no secondary education in the interior[38]. Therefore, migration to the city increased in the 1970s, where young people could continue their education in the city. Many parents also moved with their children to Paramaribo.

Prijor (2018) reported some figures that show the increase in the educational attainment of, especially the Maroon women. Prijor (2018) indicated that the working

[38] Nowadays there are some secondary schools in the districts in the Interior

population of Maroon origin with an HBO[39] or University education has increased from 188 to 1,075 in 2004 and 2012, respectively. From these amounts, the total Maroon female employed graduates were 93 and 709 in 2004 and 2012, respectively. Prijor used data from the Suriname Population Censuses 2004 and 2012.

Additionally, Vernon (2019) mentioned developments that have transformed Maroon women's lives. She described three important events in the second half of the twentieth century. First, the male labor migration to the coast. Since the 1960s, Ndyuka men who migrated to the coast took their family with them, and the children went to school in Paramaribo. In the 1970s and 1980s, women still had to be accompanied by men when they traveled outside the traditional territory. Secondly, the introduction of Western medicine in the interior resulted in 50 percent of lives saved (in the 1970s), which in turn gave rise to a demographic explosion, mainly in places like Saint Laurent du Maroni (French-Guiana), due to high birth rates (Vernon, 2019, p156). The introduction of Western medicine also had affected the survival of infants, and women continued having multiple children, in spite of what could be otherwise expected. Thirdly, the occurrence of the Civil war in 1986 in Suriname, also increased female mobility and emigration to French Guiana. During the Civil war, many women had to move from their villages, and, after it was over, they felt like they could more freely move. They began participating more in non-domestic economic activities, being now able to earn money for themselves. Thus, some women became independent, educated, and active in the labor force. Women could send their children to school in the Paramaribo or in French-Guiana. Young women of second or third generations of migrants could follow a formal education. Women in the villages also had increased economic opportunities, as money entered the village[40] life. Vernon major claim is that Maroon men's lives remained the same despite the changes in Maroon women's lives. For instance, the mobility pattern in search for work did not change. Whereas female mobility started in the 1970s and transformed their lives.

[39] HBO (Hoger Beroeps Onderwijs) is higher professional education, namely Bachelor education [40] Villages are situated in the traditional territories where Maroons (or Amerindians) live in the interior or rural areas in Suriname. As mentioned before, Amerindians and Maroons are the tribal populations of Suriname.

Paramaribo is the capital of Suriname. Surinamese call Paramaribo 'stad' or 'foto' which is translated city.

In brief, one of the factors for urbanization is education. The mobility of women had an impact on their lives and their children's lives. Education can impact attitudes, and thus also fertility behavior.

The next section notes the impact of urbanization on the culture of Maroon women.

2.3.7.4 The impact of urbanization on Maroon women's culture

2.3.7.4.1 Isolation or Acculturation

Some studies classified Maroon women into different groupings.

Amoksi (2009, p. 73-75; 2011) distinguished three groups of Maroon women because of urbanization:

1) The traditional Maroon women that has preserved their traditions. They did not integrate into society and adhere to tradition. The author claimed that it is more common among those women who were forced to migrate to Paramaribo because of the Civil War. Often, they are not educated, which makes integration difficult for them.
2) The integrated Maroon women. These have developed further in the city, letting go of certain aspects of their tradition, while remaining faithful to others. They raise their children with values and standards of both the Maroon and Western cultures. This group believes that education and organization are essential for the woman to develop, but that does not mean that one must deny one's origins.
3) The uprooted Maroon women. These no longer keep their traditions and have totally merged into the Afro-Surinamese creole society. Often, they no longer know their parents' language; especially if Dutch is the language used at home. Letting go of the tradition is partly the result of Christianization and/or Western education.

Differently, Prijor (2018) considered just two types of Maroon women, namely the traditional and the modern Maroon woman. Prijor stated that the difference between

the traditional and the modern Maroon woman is that the latter works outside the home and contributes financially to the household. However, both women should take care of the children and the house. At the same time, in Prijor words, men are the guardian, leaders, and breadwinner because of the patriarchal thinking in the Maroon society.

Important to note are the differences in the two groups that Prijor mentioned. Despite the difference in socio-economic background between traditional and modern women, the same is expected of both. All must adhere to traditions. Amoksi divides the “modern” Maroon women into two groups, the integrated and uprooted women. According to Amoksi, Christianity and Westernization have led to acculturation. It is possible that these women probably did not receive that cultural baggage from family and mother as they grew up. They probably grew up in an environment where they are not acquainted with traditions and rituals.

Women who no longer adhere to the ideology of their societies and cultures will result in changes in their behavior. Concerning reproductive behavior, for instance, if they no longer believe that many children are essential for the old age, then they will either choose to have fewer or even no children at all.

2.3.7.4.2 Changes in traditional rituals

Amoksi (2009) talked about changes in traditional rituals because of the urbanization; to this author, a Maroon woman who lives in the city gets to know modern ideas. For instance, she encounters Christianity that approves monogamy and does not allow the practice of polygamy. Moreover, the Church is not impeding the development of women. Also, urbanization makes access to education possible; consequently, some tried to do “something more” with their lives, not only having children for the bee. Educated and Christian Maroon men are less inclined to practice polygyny. The author also indicated that Suriname society does not recognize polygyny. Employers do not acknowledge polygynous marriages, because the employee can only register one wife and children of the same mother for social benefits such as medical insurance.

Amoksi (2009) also mentioned that urbanization impacts the matrilateral practices. The influence of the uncle on the mother's side is diminishing, whereas traditionally a child must put the authority of his mother's brother above his father's influence.

The rituals around adulthood have also changed, according to Amoksi. Giving pangi is still prevalent, but the girls get it at a much older age. This ritual used to happen at the age of sixteen, but as mentioned, it is now delayed due to education.

Maroon women in the city experience a clash between cultures when they marry non Maroons. Amoksi stated that women who want to adhere to their traditional customs are often prevented by their husbands who do not acknowledge the rituals and find it unnecessary for the woman to abide by them.

Concerning postpartum rituals, Amoksi (2009) stated that people adhere to the rituals surrounding childbirth because it is in the interest of women, for instance, the use of the herbal bath, to bring back their uterus and vagina into their original state. The author also mentioned that the restrictions on menstruating women are disappearing. In the city, the Maroon women do not have separate homes, where they previously isolated themselves during their period of menstruation.

For Amoksi (2009), despite these changes, the family's influence on the conservation of certain traditions is still significant, even if the impact of the city on the culture of the Maroon is large. However, there are still traditions that are preserved.

In conclusion, we see that certain traditions and rituals are maintained; some are diminishing, while others are adjusted to the environment or circumstances. For instance, women have difficulty accepting a polygynous marriage nowadays (Terborg, 1999; Malmberg-Guicherit, 2001; Amoksi, 2009). The financially independence prone the Maroon woman to refuse it and leave the husband, otherwise, to accept polygyny. On the other hand, the gi pangi ritual is maintained but given at a later age because girls must finish their education. Maroons still practice menstruation-related custom in the city, but they adjust the tradition by not sleeping in a separate hut but a separate bedroom. The authority of the uncle from the mother’s side is weakening.

Calls the attention that factors mentioned by Amoksi like urbanization, education, Westernization, and Christianity have resulted in change did not wholly diminish the culture of Maroons living in an urban setting.

2.4 A general summary of the literature review

The literature review concerning the Maroons shows differences within and among the various tribes. The findings are also from different periods, and caution is needed when applying these findings to the currently entire Maroon population consisting of the six tribes.

Maroon kinship is strongly matrilineal (S. Price). Women must provide offspring for the survival/expansion of the lineage (Koole, 2011; S. Price, 1984/1996). Fertility is valued among women and men (Terborg, 2000). Both men and women gain status when having many children (de Beet and Sterman, 1978; Goede, 2011; Terborg, 2000).

However, a ritual must take place before the girl can get pregnant. This rite of passage to adult age takes place between the ages of fifteen and eighteen (Amoksi, 2009; de Beet and Sterman, 1978; Polimé, 2000; Saaki, 2018).

Maroons also accept the pregnancy of a girl who has not received the rites of passage to adult age yet (Polimé, 2000; Saaki, 2018).

There are different reasons for bearing and raising children, according to S. Price (1984/1996): women must produce children for their lineage to ensure its continuity, children are a guarantee for her old age, women maintain their influence as ancestor when they die, women experience life without children as lonely, and women benefit from children's help from a young age.

During the pregnancy, certain customs must be obeyed to have a healthy pregnancy and to avoid complications (S. Price, 1984/1996; Polimé, 2000).

Children are considered an economic asset because they help in the family with various chores (Green, 1974). They are also seen as an investment in the future (Koole, 2010).

Maroons start at young adolescent ages with sexual activity (Jagdeo, 1993; Adams, 2003). They also practice sexual abstinence at various periods in their lifetime (de Beet and Sterman, 1978; Polimé, 2000; Adams, 2003). These periods of abstinence might affect the exposure to pregnancy and, consequently, the number of children.

Maroon women can choose their partners, but the family gives their approval (Menig, 2008; Leckie and Buunk, 2017; Kahn, 1929; Green, 1974). The age at first marriage occurs in the adolescent period (S. Price, 1984/1996; Adams, 2003). Maroons know different marriage forms: traditional, church, mixed marriages, polygyny, and modern marriages. Marriage is a relationship that brings together two families (de Beet and Sterman, 1981; Menig, 2008). But the couple must be mature to get married (Green, 1974; Polimé, 2000). Boys and girls must learn specific skills to be self-sufficient before starting a family (Green, 1974). A couple must adhere to specific rights and obligations within the marriage (Menig, 2008; Vernon, 2009). Women can divorce their husbands (Kahn, 1929; S. Price, 1984/1996; R. Price, 1973). There is material dependence in the marriage institution, specifically for the woman (Vernon, 2009; Menig, 2008; Helman, 1977; S. Price, 1984/1996).

Another marriage institution among the Maroons is polygyny (Helman, 1977; R. Price, 1974; de Beet and Sterman, 1981; de Groot, 1983; S. Price, 1984/1996; Terborg, 2000; Adams, 2003). Women, however, are not allowed to have more than one husband (Terborg, 2000; Helman, 1977; Vernon, 2009). After Christianity, not all Maroon societies continue to practice polygyny (de Beet and Sterman, 1981; Adams, 2003). Economic and modern demands also play a role in the polygyny discouragement (Amoksi, 2009). Polygyny gives social status, it is subject to social and economic obligations (Helman, 1977; de Groot, 1984; S. Price, 1984/1996; van Wetering, 1966; Vernon, 2009).

Maroon women have several rituals after childbirth (Polimé, 2000; de Beet and Sterman, 1981; Adams, 2003; van Andel et al., 2008).

In the past, Maroons did not practice fertility control (de Beet and Sterman, 1981; Hurault, 1959; S. Price, 1984/1996). Later studies revealed a low use of contraception (Jagdeo, 1993; Adams, 2003; Goede, 2011; Terborg, 1999). However, Maroons have knowledge about cultural, traditional, and modern contraceptives (Goede, 2011;

Adams, 2003). An important factor that prevents the use of contraceptives is the wish for children (Terborg, 1999; Koole, 2010). Attitudes are changing because of the economic situation in the country, increased living costs, and complications during childbirth (Terborg, 1999). Young women also want fewer children than their parents.

The decision to use a fertility control method is made by women or their partners (Goede, 2011).

Urbanization brought several changes in the lives of Maroons: increase educational attainment, participation in economic activities/labor force, earning an income, having a career, increase in marriageable age, increased awareness of practicing family planning, specifically among Maroon women (Amoksi, 2007; Amoksi, 2009; Vernon, 2009; Vernon, 2019; Prijor, 2018; van Stripriaan, 2009).

The literature shows that Maroons have early sexual activity, early age at first marriage, and institutions or pronatalist views that encourage a high demand for children. On the other hand, postpartum practices and other periods of sexual abstinence affect the supply of children. The use of contraceptives, although low, also has an impact on the supply of children but also shows that there is some motivation to reduce family size. However, the motivation to decrease the number of children is still low because of the fertility encouraging institutions.

The following chapter deals with the methodology that was applied in this study.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study focuses on the fertility behavior of Maroon women in their reproductive period 15 to 49 years in Suriname. The study will look at their fertility level and attempts to understand and explain what can contribute to it.

The aim is to explain the methods that were used to do the study. The sections in this chapter include the procedures of data collection and analysis, the researcher's role, bias and background, ethics, reliability, validity, generalizability, and challenges.

Two research methods, a quantitative- and a qualitative, were implemented. The Multiple Indicator Cluster Survey (MICS) 2010 and 2018 of Suriname were analyzed. Information on fertility and population based on the 2012 Population Census was also utilized. Next, in-depth interviews were conducted of Maroon women in the urban region of Suriname.

The choice for this mixed method was to understand demographic behavior and develop a theoretical understanding of the fertility change and the potential for fertility decline of the Suriname Maroons.

The quantitative and qualitative part of this study examines the several themes and aspects of the research questions and hypotheses. Each theme is discussed separately.

In addition, literature search was applied to find a response for hypothesis1b about the features before the modernization process played a significant role among Maroons.

3.1.1 Quantitative Method

Variables of the MICS datasets 2010 and 2018 were used to calculate fertility measures and analyze other variables.

The Multiple Indicator Cluster Survey (MICS) program is a household survey program that is supported by UNICEF. Globally, it is one of the most extensive household surveys. Data are collected in face-to-face interviews based on a set of globally recommended questionnaires that are customized at the country level.

In MICS4 (2010), three sets of questionnaires were used in the survey: a household questionnaire, a woman's questionnaire (15-49 years), and an under- 5 questionnaire (administered to mothers or caretakers for all children under five living in the household). The sample consisted of 9,356 households, of which 8,532 were occupied. There was 86.8% household response rate (i.e. 7,407), 86.9% women response rate (i.e. 6,290), 95.6% children under 5, response rate (i.e. 3,308).

The latest survey round of MICS6 was in 2018, and the results were released in 2019. The survey sample consisted of 9,580 households, of which 7,915 were interviewed; this is 90.2 percent. Of the women age 15 – 49 who were eligible for interviews (8,533), 6,999 were interviewed, this is 82 percent. The questionnaires are for the household, women aged 15-49, men aged 15-49, children under five, children aged 5 – 17, and water quality testing. Data that is collected reflect the current status of the respondent. Some reflect on past and present states, such as marriage and births. MICS6 focuses on Sustainable Development Goals (SDG).

UNICEF grants access to the microdata for research purposes via the website <mics.unicef.org>.

This study analyses specific variables of this MICS survey regarding fertility, contraceptive use, breastfeeding, and other demographics of the main ethnic groups, specifically the Maroon women in their reproductive period. These variables are related to the research questions and hypotheses. The woman questionnaire will be used.

Data Analysis procedure

Data Analysis Quantitative method

Variables used in statistical analysis

The MICS survey data are made available in SPSS, which was used to analyze the data of these surveys. Tables and graphs were created from these quantitative variables.

The following variables are used.

MICS 2010 variables for analyzing the fertility measures were “ever given birth” (CM1), “last births in the last two years” (CM13).

In MICS 2018, the variables used for analyzing the indicator fertility were “ever given birth” (CM1), “live births in last two years” (CM17), and “children ever born” (CEB). These variables indicate the number of children a woman has during her reproductive period.

The variable for sexual behavior was “age at first sexual intercourse” (SB1). The age at first sexual intercourse is an indicator of the risk of getting pregnant.

The variable for contraceptive behavior was “currently using a method to avoid pregnancy” (CP2). Contraceptive use can prevent or postpone pregnancy and therefore affect the pregnancy outcomes/number of children.

For breastfeeding the variable “ever breastfeed” (in MICS 2010, the variable name is MN24, and MICS 2018, MN36) was analyzed. Breastfeeding is part of the reproductive cycle and suppresses the fertility of a woman for some period. This affects her capability to become pregnant again.

In MICS 2010, the variable “husband has other wives” (MA3), and in MICS 2018, the variable “husband/partner has more wives or partners” (MA3) was used to look at the practice of polygyny. The change in variable name may signify differences in the data collected.

The variable “area” (HH6) refers to the geographic areas urban, rural coastal, and rural interior. MICS used settlement types to set up three strata for the sample in the ten

districts of Suriname. The urban stratum includes urban areas of Paramaribo, Wanica, Nickerie (Nw. Nickerie), and Commewijne (Meerzorg and Tamanredjo). The rural stratum in the coastal area are the rural coastal areas in the remainder of Nickerie, the remainder of Commewijne, Coronie, Saramacca, Para, and Marowijne. The rural stratum in the interior includes the rural interior areas of Brokopondo and Sipaliwini (Ministry of Social Affairs and Public Housing 2019. Suriname Multiple Indicator Cluster Survey 2018 Survey Findings Report, p. 4). This variable was essential in calculating the age-specific fertility rates for the Maroons residing in the urban, rural, and interior regions of Suriname.

Finally, demographic variables: “age” (WAGE), “education” (welevel), “ethnicity of household head” (ethnicity), “currently married or living with a man” (MA1), Region (HH7) are analyzed to look at their relationship with respect to fertility, contraceptive use, breastfeeding, and polygyny.

Statistical analysis

Descriptive analysis

Frequencies

Frequencies were run first to see if some variables needed to be recoded.

Descriptive data, including descriptive statistics – crosstabulations, were done.

It should be considered that due to the sample size, the more disaggregated the analysis, the higher the interval of variation of the indicators here produced.

Recoding

The command “Transform” in SPSS is used to recode into different variables.

Variables were recoded, by using the functions “data- select cases- if condition is satisfied.” The recoded variables were then placed into the following groups.

The variable “age at first sexual intercourse” was recoded because individual ages were presented. These individuals’ ages were aggregated into age groups so that it

became convenient to analyze the data. The new groups are: 0 = never had intercourse, 1 = >14, 2 = 15-17, 3 = 18-19, 4 = 20+, 95 = first time when started living with partner, 97 = inconsistent, and 99 = missing. Codes 0, 95, 97, and 99 are similar codes of the variable before it was recoded.

The variables “currently married or living with a partner” and “formerly had a visiting partner” are in MICS 2018 but this information is not included in the 2010 MICS. These percentages influence the “not in union” column. Also if these women “formerly had a visiting partner,” this is included in the column “not in union” because they had the visiting partner in the past, and not currently furthermore, to be comparable to 2010, the column “not in union” is added to the column “formerly had a partner.”

Calculation of age-specific fertility rates (ASFR), total fertility rates (TFR), and mean parity

From MICS 2010 and 2018 data on live births in the last two years by specific age groups of women were used to estimate the ASFR and the TFR of the main ethnic groups in Suriname. These measures show the average number of children who will be born per woman during childbearing age according to a current schedule of age specific fertility rates/current birth rates.

The ASFRs and TFRs of Maroon women living in the urban, rural, and interior of Suriname was also calculated for the periods 2010 and 2018, using similar variables. Data from MICS 2010 and 2018 on live births in the last two years by specific age groups, and geographic areas of Maroon women.

In the dataset of MICS 2018, the data on children ever born (CEB) was analyzed to calculate the mean parity since it gives an indication of the total number of children a woman has had, the parity. MICS 2010 does not have data on CEB.

After estimating the ASFRs and TFRs of women of the main ethnic groups, the data were filtered for the Maroon (based on proxy indicator “ethnicity by the head of household”). After that, descriptive statistics were calculated, and cross tabulations were done.

The Suriname Population census 2012 was also utilized to estimate fertility indicators. Fertility rates were estimated for Suriname and Paramaribo.

3.1.2 Qualitative Method

Fertility is one of the key demographic processes that influence population change. Pregnancy, however, is dependent on two components, namely fecundity (i.e., the physical capability to produce) and reproductive behavior. These can be affected by a combination of factors that can determine and/or influence the fertility performance and outcome in a population group or society. This study focuses on reproductive behavior. Factors will be identified so that a better understanding is gained. Behavior patterns can explain variations in levels and trends in fertility. To define, understand, and explain this demographic behavior, both quantitative and qualitative research methods were used.

Qualitative methods can be useful in demography. They can allow for a fuller understanding of survey findings, can contribute to devising an explanation for some of the relationships being studied, and confirm or contradict survey results (Knodel,1997, p.850-851). Data collection through qualitative methods can also "improve the measurement of variables and discovering new causal factors and deepening the understanding of survey results" (Greenhalgh, 1997, p.821). As such, they can have significance in searching for understanding of individual motivations and behavior concerning broader patterns.

Data collection strategy

A semi-structured format was used for interviews conducted with Maroon women age 15 and above. An Interview script was developed with themes based on the research questions and related hypotheses. The topics involved questions about demographics, marriage, fertility, reproductive rituals, contraceptive use, breastfeeding, and other postpartum practices.

The in-depth interviews were conducted in the period April – July 2019 in Suriname, specifically Paramaribo and Wanica. Demographic variables and qualitative information from each participant were collected. Transcripts were written in the languages that were used during the interviews: Dutch and Sranan. These transcripts were then translated into English.

The transcripts and the demographic data of each respondent were placed in a relational database (different types of data connected) application Dedoose, a web-based application (<www.dedoose.com>). The demographic data was placed in an Excel sheet. Dedoose as a research and evaluation data application (REDA) enables the researcher to manage and analyze data, using transcripts, excerpts, codes, and descriptors. The analysis of qualitative and mixed-method research can be done in this application.

Sample technique and Procedure selection participants:

Firstly, according to the conceptual frame, women chosen to be interviewed were 15 – 49 years of age, belonging to the Traditional, Roman Catholic or Pentecostal religion[40] and having an educational level ranging from no schooling/Primary, Secondary or Higher education.

Thus, respondents were selected based on specific criteria such as age, religion, and education. Snowball sampling was, therefore, based on these specific criteria. The researcher used the network of contacts to recruit participants. These contacts recommended potential respondents or contacts who could further help with recruiting potential participants.

The researcher contacted everyone on her phone list to find out if there was anyone who had Maroon friends or acquaintances. The researcher also received a couple of contacts from the co-supervisor, who works with the Saamaka since 2011. In the early period of the interviews, 10 to 16 April, four informants provided contact information of informants and potential respondents. One of these informants gave the same names as the co-supervisor. The number of contacts given by these informants was five. Out of these five contacts, two were pilot interviews. Four of these five contacts recommended nine potential participants. All these 9 Maroon women were interviewed. While appointments were made with these nine participants, the researcher continued

[40] The latest Census (2012) indicated that the most significant religion categories among the Maroons were the Traditional religion, Roman Catholic, and Pentecostal.

searching for other participants. Other informants provided contact information of potential participants later. Two respondents assisted immediately after their interview.

The researcher asked the respondents after interviewing if they knew other women that would be willing to participate in the research. Thus, some of the respondents also gave contact information about other potential respondents in their network. Recruiting respondents was a continuous effort during the entire period of interviews. Thus, the number of respondents in the research increased to 47 women.

Also, continuous checks were done by the researcher of the list of respondents to avoid as much as possible unequal numbers of women with specific criteria such as age, young or old. An effort was made to search for more participants where there were few respondents noticed in the respondent list.

Research area versus place of origin or residence of respondents

Although the focus of the research was on the districts of Paramaribo and Wanica, some participants are not residing in this urban region. Most women in the study live in these districts. On the other hand, several of the participants are living in other districts, i.e., Commewijne and Para. Some of these women are working or attending school in Paramaribo, and therefore commute to the city daily. A few were attending a funeral in the city at the time of the research. Moreover, one respondent, as mentioned before, resides in French-Guiana. It should be noted that some of the respondents who are currently living in other districts, were born in Paramaribo.

With respect to the birthplace, most respondents were born in the capital, Paramaribo. The place of birth of the remaining respondents is in districts where the highest number of Maroons reside (i.e., Sipaliwini, Brokopondo, and Marowijne).

The above points out to diversity in the composition of the group of respondents. Geographically, the districts Commewijne and Para belong to the rural areas of Suriname. Whereas the districts Sipaliwini, Brokopondo, and Marowijne are situated in the rural interior region. Paramaribo and Wanica are the urban regions (see 1.3 Research area).

Previously, reference was made that Maroons maintain their culture and languages even if they migrate to Paramaribo and other parts of Suriname (see 1.2 Research population).

We assume, therefore, that rural influences could preserve the beliefs and traditions which in turn might impact the behavior and as such the responses in the qualitative results of this study.

Data collection-Fieldwork procedure

A pilot test was done with two Maroon women. One of these women had many years of experience with surveys and censuses. These two women provided useful feedback. The interview script was adjusted based on the input of the pilot tests.

Adjustments to initial groups of respondents: Initially, women who belong to the Moravian church were not included, even though the Moravian religion is also significant and the first Western religion that was introduced in the villages of the Maroons, in the 18th century (Pires, 2015). The reason was that the original plan was to only interview women belonging to the three largest religious groups (namely Traditional, Roman Catholic, and Pentecostal). During fieldwork, however the researcher encountered women who profess the Moravian religion and decided to include them in the study.

Also, a small number of women aged 50 and above were interviewed because of their willingness to participate in the research. Although these women have passed the reproductive period, they may give an indication of eventual differences in past fertility behavior among the Maroon population compared to the younger generation of Maroon women.

Some respondents were related to each other. The researcher interviewed a mother and her daughter, three pairs of sisters, and three cousins.

In the period of April to July 2019, 47 interviews were conducted. The number was not established to attain saturation, but about aiming for the collection of rich information to address the research questions and related hypotheses. The available time and

resources to do the research have played a role in not conducting more interviews. Of these 47 interviews, only 35 are actually analyzed in the study due to time restraint.

The researcher always asked the informants first to request permission from the potential participants before transferring their contact information to the researcher. Then telephone calls were made to these potential participants. The researcher introduced herself, gave a short explanation of the project, and asked if the potential respondent was willing to participate. Then, an appointment was made with the respondent to meet at a specific date and place.

The choice of place and the language spoken to conduct the interviews were left to the respondents. The respondent chose the date of the interview and the meeting place.

The respondents chose to be interviewed at home; in the mall; under a tree; outside in the parking lot of the workplace; in front of a supermarket; in office; school; and so on. Many respondents chose to be interviewed at their homes, and some in their offices. The duration of the interviews lasted between half an hour and a bit longer than an hour.

Before the commencement of the interview, the purpose of the study was explained again. A general idea was given to the prospective respondent what the content of the interview was going to be like and the duration. The respondent was also asked in which language they fell the most comfortable to speak. The interviews were in Dutch or Sranan or a combination of these. One of the young respondents chose to speak in English because she said that she liked that language. In one case, two cousins were interviewed at the same time because one could not speak neither Dutch nor Sranan, as she left Suriname at a very young age to live in French -Guiana. This respondent was pregnant of her first child during the time of interview and spending a period in Paramaribo. The other respondent used their Maroon language to translate the questions or explanations of the researcher.

Interview guide

An interview script was developed based on the research questions and related hypotheses. The qualitative data analysis themes concentrated on the topics in this interview guide. These themes are fertility behavior, union formation, contraceptive behavior, postpartum practices, and socio-demographic characteristics of the respondents. Each theme consists of a list of codes.

Discussion themes focused on questions concerning fertility, contraceptive use, union formation behavior, and postpartum practices.

Questions regarding were asked about the importance of children for the respondent, reasons why women do (not) want to have (more) children, the importance of children for the husband/partner and the family and religion from the respondents' perspectives, decision making regarding children.

The questions about contraceptive use mainly were discussions about cultural[41] and modern contraceptive methods, respondents' opinions and experience with contraception, reasons why they use/do not use, the view of husbands/partners and family about contraceptive use from the respondents' perspective, and decision about contraception.

Union formation theme looked at the question regarding reasons for divorce, marriage, partner choice, and practice of polygyny.

Postpartum practices theme discussed breastfeeding and sexual abstinence traditions and postpartum rituals.

[41] The name "cultural methods" is used for herbal medicines, massages, home remedies that are used by Maroons to either stimulate or prevent pregnancy. Traditional contraceptive methods such as coitus interruptus/withdrawal, rhythm, were mentioned by a few respondents. These should not be confused.

Recording

All interviews are recorded by date with an IC recorder. The original transcripts were written in the two languages Dutch and Sranan. These transcripts were then translated into English. The translations were used for the analysis of the qualitative data in Dedoose.

There were two cases in which two participants were interviewed simultaneously- the aforementioned case of the woman who did not speak Dutch or Sranan, and an interview taken at one time, whit a mother and a daughter who wanted to be interviewed together. In the former case, responses could likely have been influenced by the other. In the latter, there were differences but also additions to the discussions, which made the interview more interesting. Questions were asked to each participant separately.

Data Analysis procedure

The responses to the various questions were first examined. After the analysis, preliminary themes and codes were given. The demographic and other quantitative data of each participant were placed in an Excel sheet. The Excel sheet and English translated transcripts were imported in Dedoose. A project was created in Dedoose linking the demographics on the excel spreadsheet and the transcripts of each individual participant. Each individual transcript has a unique title that links it to their unique Dedoose ID and demographic set of variables of the respondent.

Coding process

The various themes were analyzed through coding of the responses of the questions. The responses to each question were coded to make the data analysis easier. Variable names were given to the answers of the respondents. Similar answers of respondents were grouped into the same codes.

The transcript of each respondent was transferred to the Dedoose. Pre-coding was done before placing the transcripts in Dedoose.

Data processing

Ages of respondents were grouped into age groups 15-29, 30-39, 40-49, and 50+

The number of children of the respondent and the number of children of the husband/partner was also grouped. Age at the first sexual experience of the respondents was also arranged (below and above 18 years of age).

Each transcript was analyzed to assign labels to significant information or fragments of responses. These codes were categorized to generate themes.

The list of preliminary themes and codes were re-evaluated to make a final list. This ultimate list was used to do the final analysis of the qualitative part of this study.

Themes generated from the qualitative data were fertility behavior, postpartum practices (i.e., breastfeeding, postpartum abstinence, postpartum practices/reproductive rituals), contraceptive use, union formation (i.e., the divorce of women, marriage, and polygyny).

Table 3. 1 - List of codes (or parent codes) in Qualitative data analysis

Fertility behavior
▪ Importance of children for women ▪ Child preference for women ▪ Women's preference for boys ▪ Women's preference for girls ▪ Religious/Cultural attitude concerning children ▪ Reproductive decision making ▪ Husband's expectation for children ▪ Importance of children for a husband ▪ Family's expectation for children ▪ Reason family's expectation for children ▪ Women's reason for wanting (more) children ▪ Women's reason for not wanting (more) children
Union formation
▪ The occurrence of divorce women ▪ Acceptable reasons divorce women ▪ Conditions for divorce women ▪ Partner choice ▪ Practice of polygyny ▪ Condition of practice polygyny ▪ Polygyny examples ▪ Dynamics in polygyny ▪ Husband more wives

Table 3.1 List of codes (or parent codes) in Qualitative data analysis (Continued)

Contraceptive behavior
▪ Women's experience of contraceptive use ▪ Women's reasons contraceptive use ▪ Women's reasons not using contraceptives ▪ Women's view on contraception ▪ Ways to get pregnant ▪ Ways to prevent pregnancy ▪ First time used a contraceptive ▪ Influence on Women's contraceptive use ▪ Husband's view on contraceptive use ▪ Family's view on contraceptive use ▪ Reason family's view on contraceptive use ▪ Contraceptive education ▪ Access contraceptives ▪ Pregnancy planning ▪ Reason no pregnancy planning
Postpartum practices
▪ Duration breastfeeding ▪ Reasons for duration breastfeeding ▪ Importance of breastfeeding ▪ Breastfeeding education ▪ Practice of postpartum abstinence ▪ Duration of postpartum abstinence ▪ Women resume postpartum abstinence ▪ Reasons for practicing postpartum abstinence ▪ Family's view postpartum abstinence ▪ Husband's view postpartum abstinence ▪ Postpartum rituals

3.1.3 Researcher's role, bias, and background

The researcher that is also a citizen of the country of study, has done previous research in this academic area among the Maroon population. She also has been exposed to reading material on various topics written about the research population.

The researcher tried as much as possible not to influence responses. Only when a question was not clear, did she give an example to clarify the question for the interviewee.

The researcher knew none of the respondents before the interview was conducted.

In general, although there exist other sources of bias when conducting research, the researcher is not aware or has not experienced any such bias.

In this study, the researcher conducted, transcribed, and analyzed all the interviews. The transcriptions and translations took about 40 percent of the time on tasks before commencing with the analysis procedures.

3.1.4 Ethics, Reliability, Validity, and Generalizability

At the start of each interview, the researcher asked permission to use a recorder. It was explained to the respondent why the recorder was used and about the confidentiality of the interview and of the research.

All participants who expressed their willingness were then interviewed. Three women could not participate due to personal circumstances, and thus, were not interviewed. Respondents were also free to refuse to answer questions if they did not feel comfortable answering. A few respondents did not answer questions about the husband's view on contraceptive use and postpartum practice or expectation for children. Three of these respondents were separated or divorced, and one respondent was widowed. These respondents did not like to answer questions related to partners. Some items were not relevant to several respondents; respondents who never had sexual intercourse and did not have children or did not use contraceptives were not able to answer questions related to these themes.

Guaranteed confidentiality. As much as possible, the names of respondents were not used during the recording of the interviews. In one case, at the end of the interview, the researcher mentioned the last name of the participant when she was explaining something while the recorder was still on. Some participants also used their first name during the interview when giving examples of some instances. Furthermore, in the transcripts and the Excel sheet, the names of the respondents are not mentioned. Pseudonyms were given to each participant in the data analysis. African names were chosen because the researcher found that appropriate for Maroon women who are descendants of escaped African slaves. Care was taken in the choice of names since all the African names have a meaning.

No third party was involved in listening to the recordings and writing of the transcripts. Not even the supervisors had access to this material. The researcher wrote the transcripts and prepared the Excel sheet containing the demographic data.

Where there are cases of the partner being from an ethnic group other than Maroon, the researcher has placed it in the “Other” category for confidentiality purposes because the cases were few.

In instances where village names were reported as the place of birth, the researcher placed it in the district where the village is situated. This change was also done for confidentiality purposes.

The research findings and conclusions are only applicable to the respondents residing in the urban region of Suriname. Hence, the conclusions are not generalized to the entire Maroon population.

3.1.5 Challenges

At the start of the research, one of the challenges was to get participants with described criteria, especially those belonging to the traditional religion, and women of younger ages15 to 20.

Regarding time and distance: interviews were often taken on Sundays, during the week after work time, or in the city, workplace, market, at the home of participants that is a distance away from the center of the city.

In public places such as at the market where there are customers, in the mall where there are other visitors and so on and more private areas such as at the home of respondents were children, and other relatives were present, may have disturbed the privacy. Sometimes, there was also a lot of noise in these places.

4. RESEARCH FINDINGS

This chapter presents the quantitative and qualitative results aiming to answer the research questions of this study. The quantitative analysis presents the findings corresponding to the Multiple Indicator Cluster Survey (MICS) 2010 and 2018. These two surveys allow us to detect changes in the reproductive behavior of the Maroons and to indicate that they are undergoing a process of demographic transition.

The qualitative analysis highlights the findings of the in-depth interviews of 35 respondents. They will bring about a more profound understanding of the quantitative results. These explanations are applied only to the group of Maroon women, residents in Paramaribo and Wanica, that have participated in this qualitative research. No attempt is made to reach conclusions for the entire Maroon population since the findings of this study cannot be generalized.

4.2 Quantitative analysis- MICS 2010 and 2018

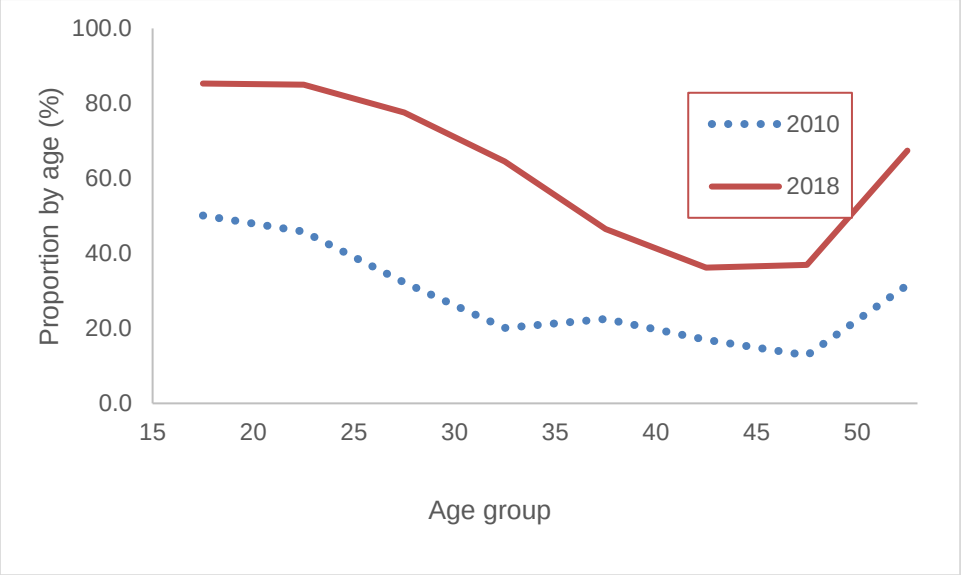
4.2.1 Socio-demographic characteristics of Maroon women in MICS 2010-2018.

Education

Figure 4.1 demonstrates that the education level has increased in all age groups between 2010 and 2018. The age group 25-29 has increased from 32 percent in 2010 to 78 percent in 2018.

The rise in education shows that Maroon women have improved their educational status and thereby their social status in society.

Figure 4. 1- Suriname- Percentage of Maroon women with complete primary education or more by age, 2010 and 2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

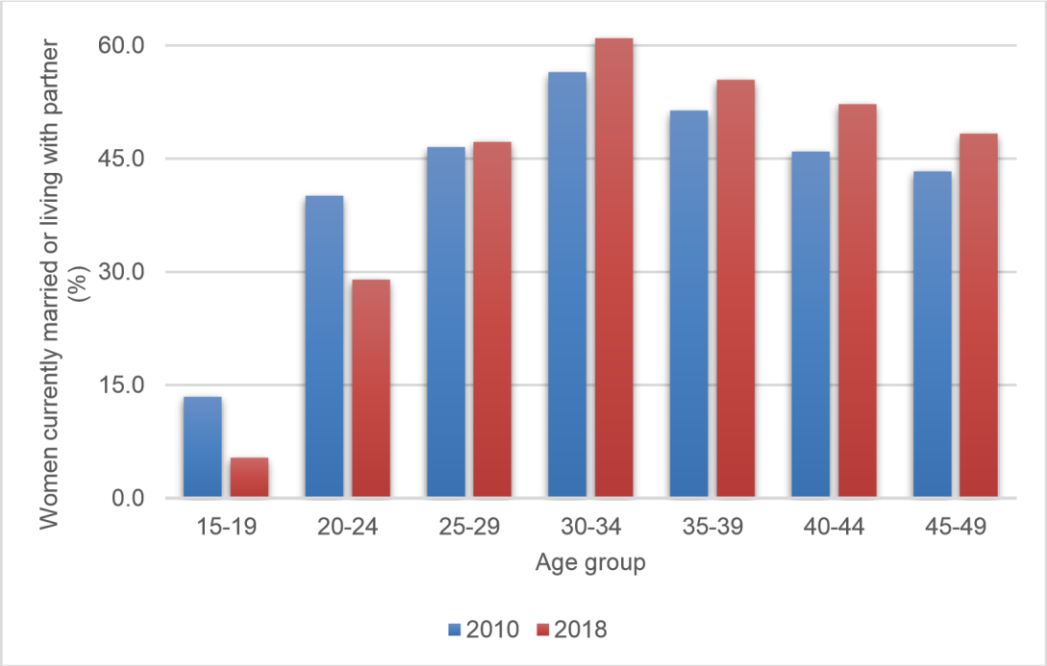
Marital status

Figure 4.2 depicts the women who are at risk of being pregnant since they are in a stable union: marriage or concubinage. There is an age pattern change. In 2018, the proportion of young women 15-19 married or living with a man declined, which means that they are postponing their entrance into marriage and the risk of becoming pregnant

and having a live birth. The decline is consistent with figure 4.6 on the age at first intercourse that points out to a rise in the age at first intercourse between 2010 and 2018. The 2010 age pattern evolved to an older one in 2018.

Surveys and censuses in Suriname do not include traditional marriages. Only civil marriages, according to the law, are legal marriages. Therefore, the percentages "living with a man" may be high compared to other populations or countries because women in traditional marriages may report that as their union status.

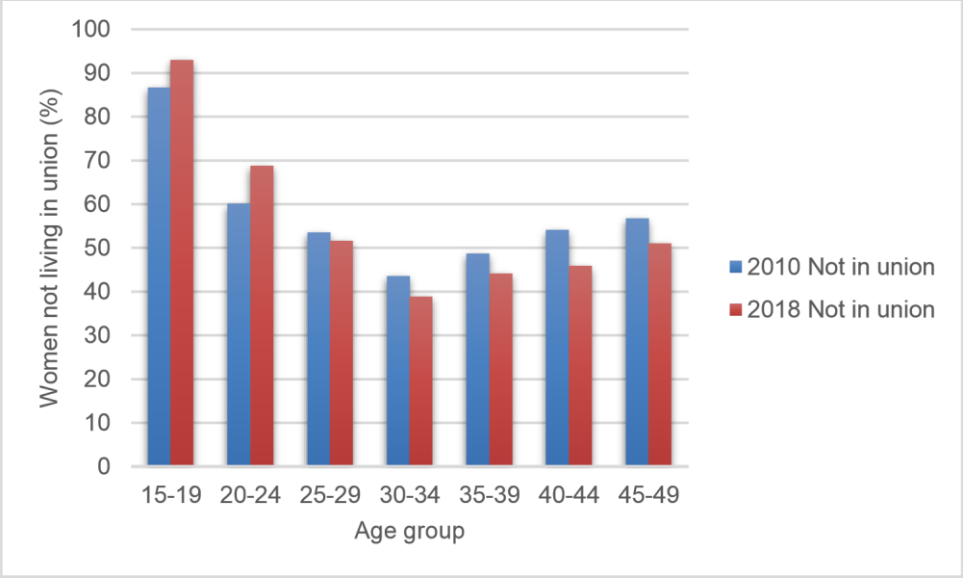
Figure 4. 2- Suriname- Percentage of Maroon women currently married or living with a partner, 2010 and 2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Figure 4.3 displays the proportion of women who are not in a union. Complementary to the findings related to women with current partners, there is a significant portion of younger Maroon women in the youngest age groups 15-19 who are not in a union. Older women are more likely to be in a union.

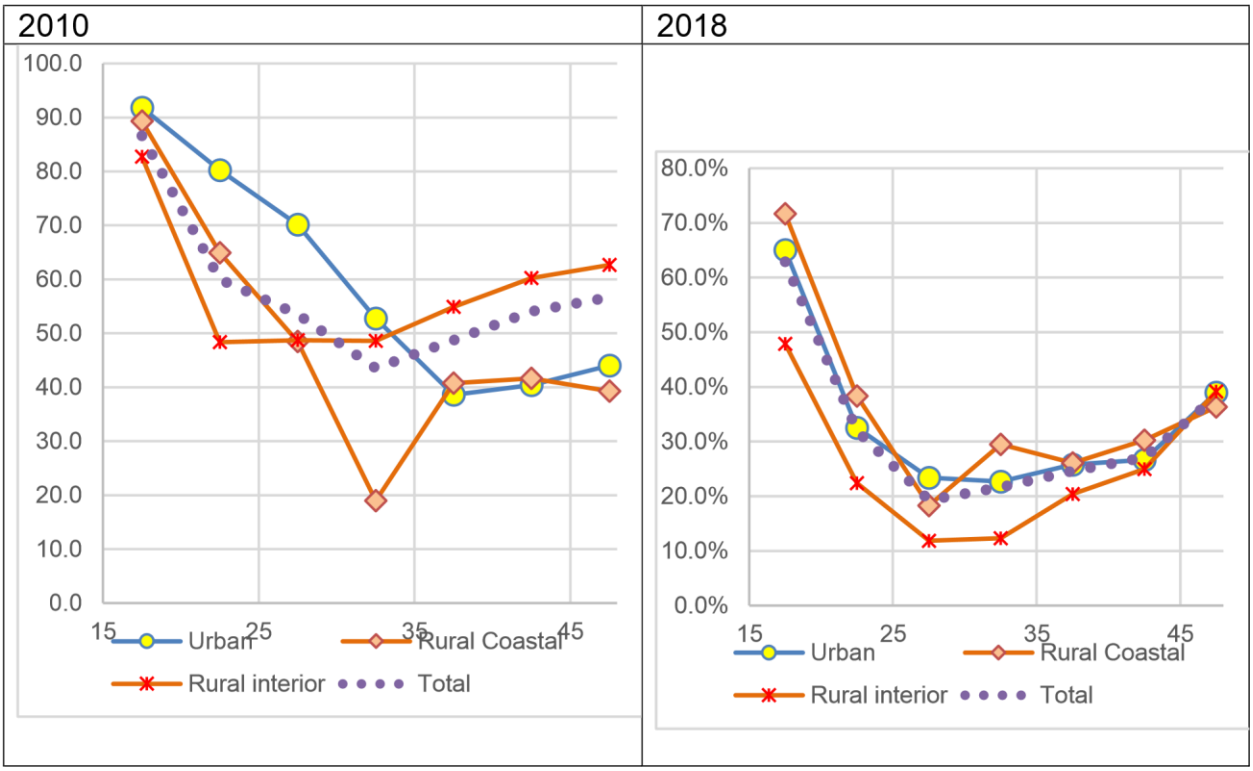
Figure 4. 3 - Suriname- Percentage Maroon women who are not in a union by age, 2010 and 2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Figure 4.4 illustrates that the percentages of women who are not in a union have declined in all geographic areas.

Figure 4. 4 - Suriname- Percentage Maroon women who are not in a union by age and geographic area, 2010 and 2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Husband has more wives

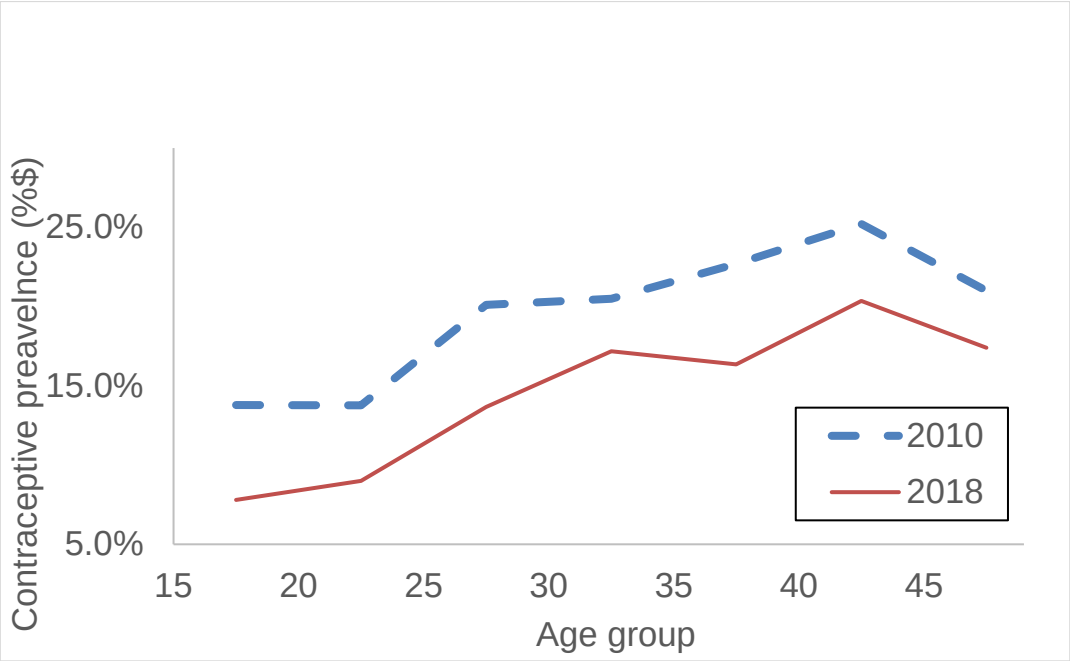
Figure 4.5 displays that between 2010 and 2018, a smaller percentage of women in younger age groups seem to have a husband or partner who has more wives compared to those in the older age groups. This small percentage is possible for reasons that a higher rate in these age groups is not living with a partner yet, or maybe the marriage is still recent, and therefore, the husband did not choose other wives. Or it can be that women do not accept so promptly that their husband/partner has other women.

Besides, there is a noticeable decrease among women in the last age group 45-49 who had a husband with more wives. Although this trend could be attributable to the sample size variations, it is worth to note the trend does appear in the results of both surveys (2010 and 2018).

Overall, there seems to be a change either in women not accepting polygyny or husbands who do not want another wife. Maroon men need to take care of all wives equally. Thus, he should be financially able to take care of all the material needs of these women similarly. The obligations regarding polygyny are explained in chapter 2.

In 2018 there are less polygynous relationships among Maroon women. The decrease in polygyny may indicate that women are no longer in a polygynous relationship. The qualitative findings will give possible explanations for this change.

Figure 4. 5 - Suriname - Percentage of Maroon women by age whose husbands have another wife, 2010 and 2018

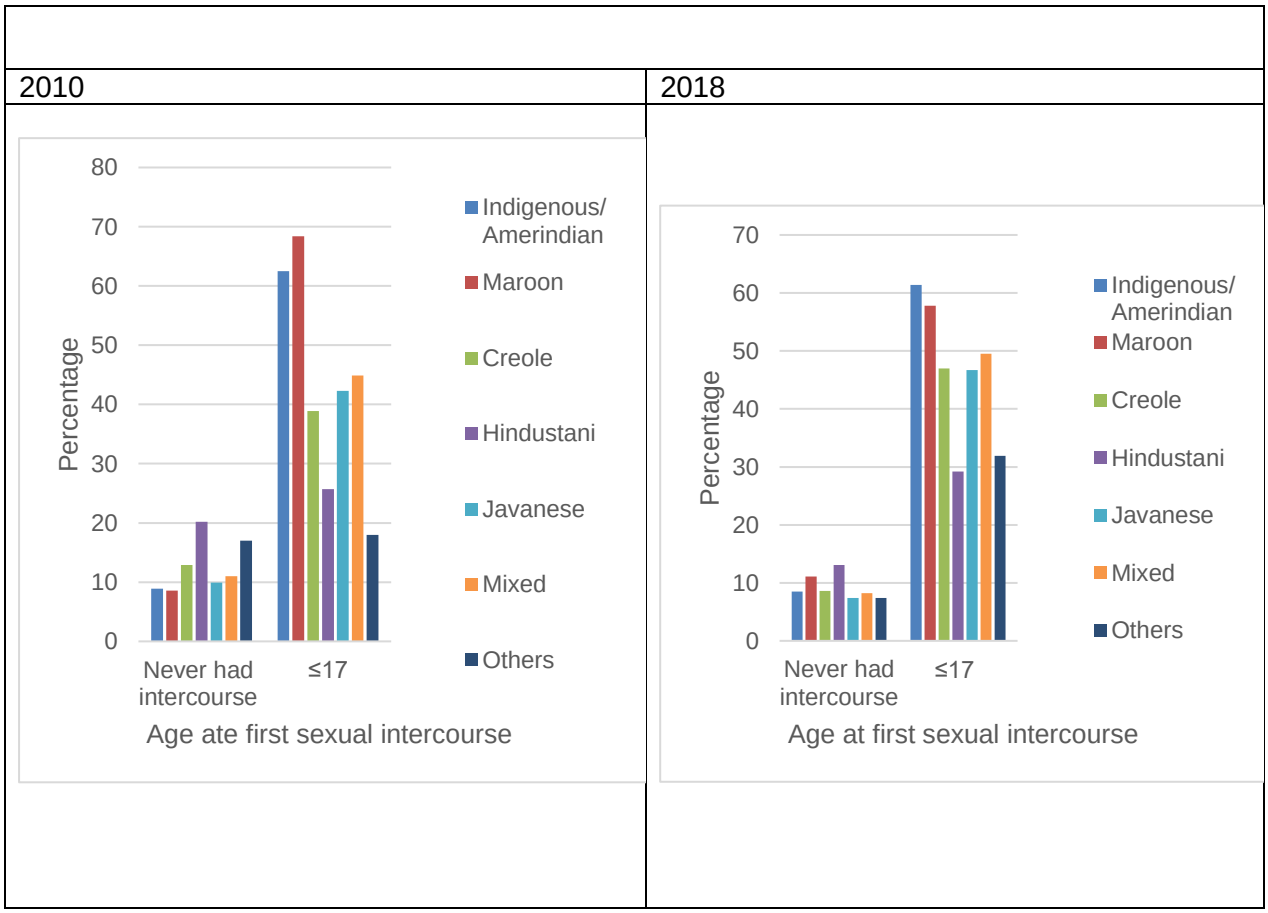


Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Age at first sexual activity

Figure 4.6 demonstrates that the age at the first sexual encounter of Maroon women has declined compared to women of other ethnic groups in Suriname. The data present a decline in the age at first sexual encounter at ages 17 and younger between 2010 and 2018. On the contrary, women in the other ethnic groups experienced an increase in the age of the first sexual activity at ages 17 years and younger. On the other hand, the age in first sexual intercourse at ages 18 years and older increased among Maroon women and decreased among women in the other ethnic groups.

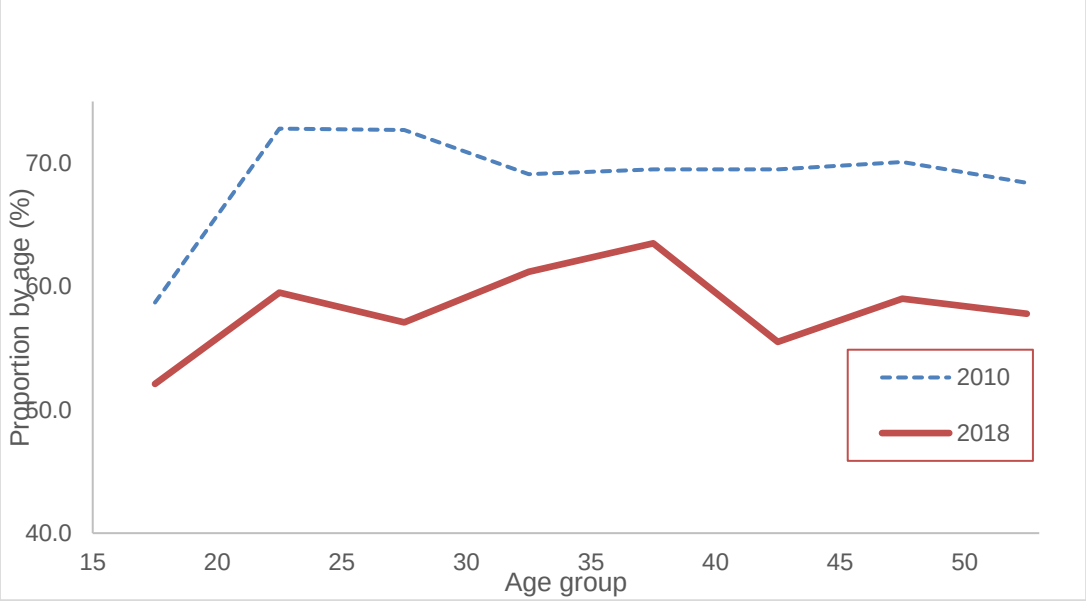
Figure 4. 6 - Percentage of Women by Ethnic group that never had intercourse or had it before the age of 17 in Suriname, 2010 and 2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (2018 MICS6) and UNICEF (2010 MICS4). Available from http://mics.unicef.org/surveys

Figure 4.7 illustrates that the age at first sexual encounter has decreased between 2010 and 2018. The postponement of sexual initiation is compatible with the increase in educational levels. The age group 20-29 experienced a significant drop from 73 percent to 57 percent in 2010 compared to 2018.

Figure 4. 7 - Percentage of Maroon women by Age at first sexual intercourse by Age, in Suriname, 2010 and 2018



Source: Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

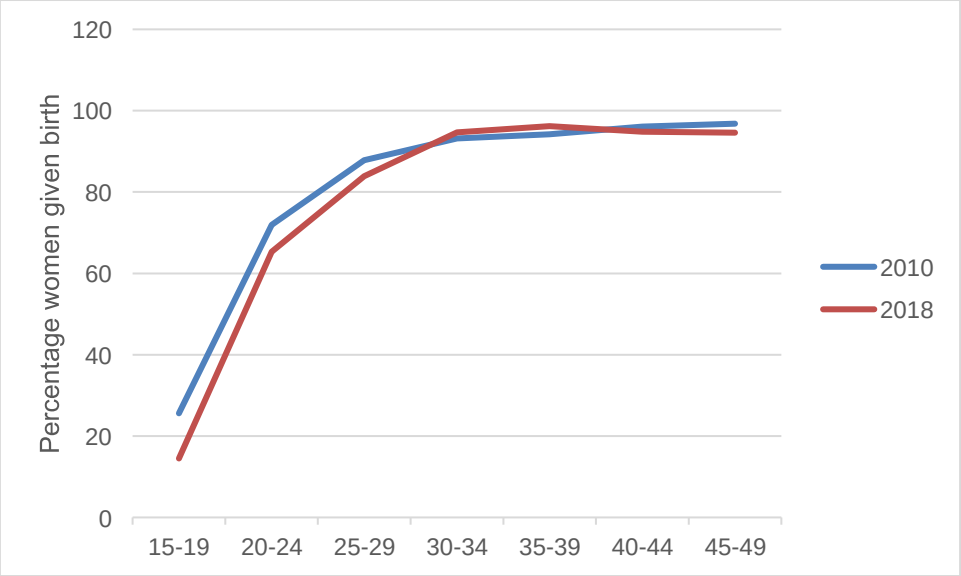
Thus, this indicates that there is a shift in age at the first sexual experience. More women start having sex at a later age and thus resulting in women beginning childbearing at a later age.

Ever given birth

Figure 4.8 (and Table 4.9, see Appendix) indicates a change in the proportions of young Maroon women ages 15-29. In 2018, the percentages decreased remarkably among the youngest age category 15-19 who reported to have ever given birth compared to 2010. Only the age groups 30 to 39 had a slight increase in giving birth in 2018. Nearly all women have had children at the end of their reproductive life.

There is a trend to increasingly delay having children. This drop in the proportion of adolescents who gave birth is in tune with the increase at the age of first sexual initiation and progress in education.

Figure 4. 8 - Suriname- Percentage Maroon women who have given birth by age, 2010 and 2018



Source: Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

4.2.2 Fertility

Table 4.2 presents the age-specific fertility rates per 1000 women and ethnic groups for 2010 and 2018.

Trends in fertility rates/differences by ethnicity

The fertility rate remained stable in Suriname between 2010 and 2018. The Total Fertility Rate (TFR) was 3, meaning that fertility in this country is still above the replacement level (2.1). A replacement level is required to ensure that the population remains stable. The replacement level of 2.1 shows that their offspring replace each set of parents. Stability over this period is a product of two opposite trends. With the only exception of the Maroons, all the other ethnic groups experienced increases of different magnitudes in the TFR. The last row of the table shows that the most significant decrease in TFR was among the Maroon population. The total fertility rate of the Maroon population declined from 5.3 in 2010 to 4.1 in 2018. Although this shows that there is a fall in the TFR, the Maroon people still has the highest TFR compared to the other main ethnic groups in Suriname. The Amerindian population has the second-highest TFR.

In 2010, the Javanese showed a TFR below replacement level (2.0); however, this increased in 2018 to a TFR of 2.6, indicating that fertility moved above replacement level in 2018.

Furthermore, the Creoles show a significant increase (0.9 percentage points) in the TFR, from 2.3 in 2010 to 3.2 in 2018. This increase signifies that Creole women had one child more in 2018.

The age-specific fertility rates (see table 4.2) display the changes in fertility and the variation in the fertility levels of the ethnic groups in Suriname.

Differences by age

In general, the age pattern of the Maroons is older, consistent with the higher fertility level they have. Notice, also, that the mean age of the Maroon fertility pattern increases, indicating that they maintain high fertility rates even at the older ages of the reproductive period.

Table 4.2 also demonstrates that there is a decline in the number of births per 1000 women in all age groups, except for the 35 to 44 age groups. In 2018, the fertility of Amerindian women was highest at age 20-24; the rate was 0.2188, meaning that in 2010 approximately 219 children were born for every 1000 Amerindian women aged 20-24.

The age-specific fertility rates in 2010 and 2018 vary among the ethnic groups. The youngest Maroon women aged 15-19 had the most significant drop in fertility (from 109.7 in 2010 to 57.9 in 2018), followed by the Javanese adolescents. Fertility is lower among Javanese women aged 15-19 years. There is a decline noticeable at all ages among the Maroon women.

In short, Maroon women have the highest age-specific rates except in the youngest age groups, 15-19 and 20-24. The decline at these young ages signifies that Maroon women have children later than women in other ethnic groups. However, in the older ages, 25 to 49 Maroon women have the highest age-specific rates. In 2010 and 2018, the Maroon women 25-29 had the highest fertility, meaning that the number of children born per 1000 Maroon women aged 25-29 was more significant compared to other women at reproductive age in Suriname in that age group. Close to 239 children were born in 2010, and 191 were born in 2018 for every 1000 Maroon women aged 25-29.

In sum, the Total Fertility Rate (TFR) and the Age-Specific Fertility rates (ASFRs) of the Maroon population are declining over the period. Also, most of the other ethnic groups- the Creoles, for instance - have presented an opposite trend, either maintaining or increasing in the fertility level, demonstrating significant increases. Nevertheless, these fertility rates are higher compared to those of women from the rest of the ethnic groups in Suriname.

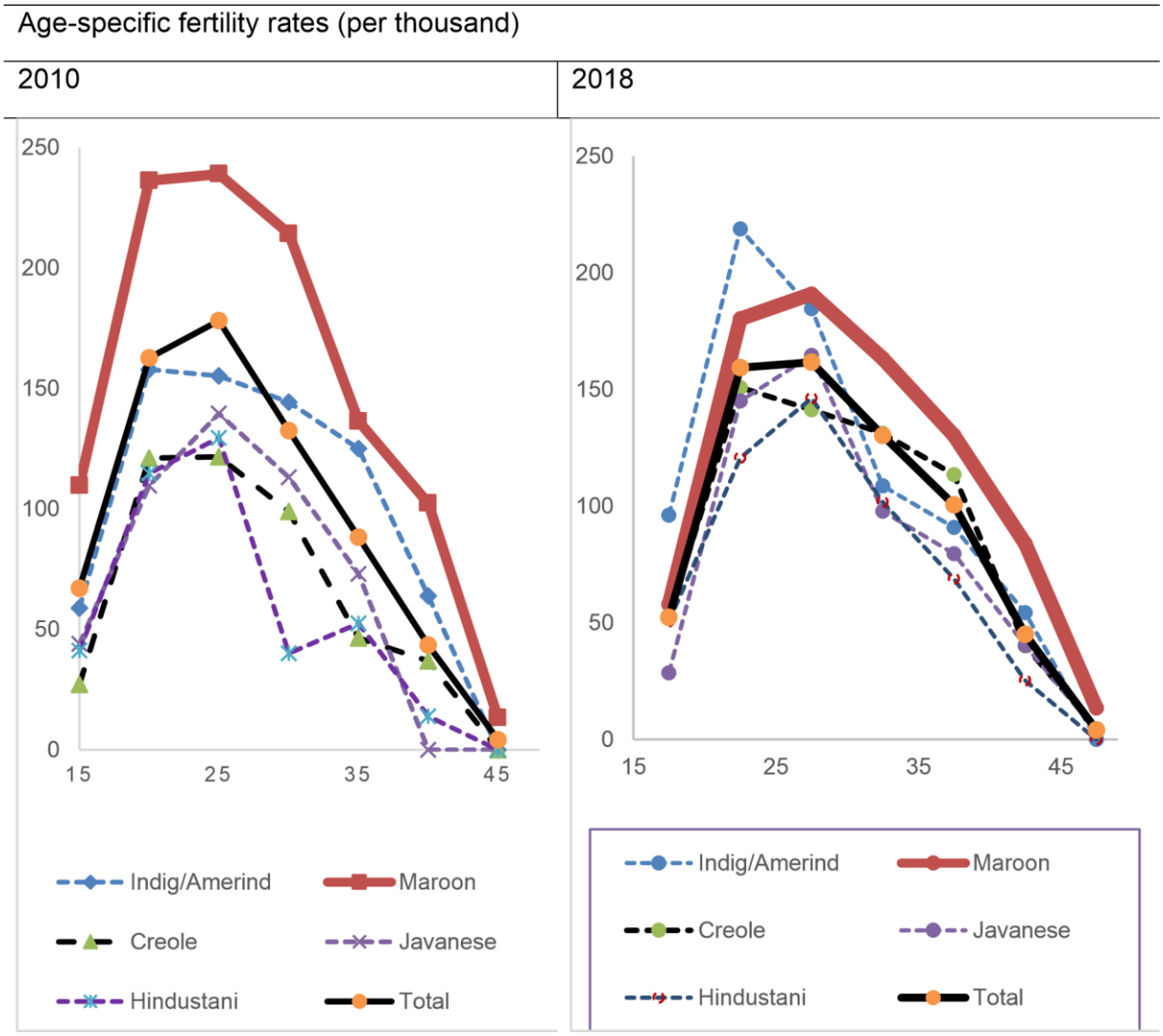
Table 4. 1 - Suriname- Age-specific fertility rates (ASFR) and total fertility rates (TFR) of Ethnic groups in Suriname, 2010 -2018

	Age-Specific Fertility Rates per 1000					
Age	**Indigenous/Amerindian**	**Maroon**	**Creole**	**Javanese**	**Hindustani**	**Total**
		2010				
15	58.8	109.7	27.1	44.0	41.2	67.1
20	157.9	236.2	121.1	109.6	114.8	162.7
25	155.2	239.0	121.6	139.5	129.5	178.1
30	144.2	214.3	98.9	113.1	40.0	132.5
35	125.0	136.4	46.4	73.1	52.5	88.2
40	63.8	102.3	36.8	0.0	13.9	43.5
45	0.0	13.4	0.0	0.0	0.0	4.2
TFR	3.5	5.3	2.3	2.0	2.4	3.4
Mean Age	29,7	29,4	28,9	28,1	27,4	28,7
		2018				
15	96.2	57.9	53.0	28.6	50.6	52.3
20	218.8	180.3	150.9	145.0	120.8	159.3
25	184.6	190.9	141.2	164.6	146.3	161.7
30	108.7	163.3	131.2	97.7	101.7	130.3
35	90.9	130.3	113.5	79.5	68.8	100.5
40	54.3	83.9	40.0	40.3	25.3	45.0
45	0.0	13.4	4.6	3.8	0.0	4.1
TFR	3.8	4.1	3.2	2.6	2.8	3.3
Mean Age	27,8	30,1	29,4	29,2	28,4	29,2

Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Figure 4.9 illustrates the comparison of age-specific fertility rates of 2010 and 2018. Maroons experienced a notable decline among all age groups. In contrast, younger Amerindian women had higher rates of fertility.

Figure 4. 9 - Suriname - Ethnic groups by Age-specific fertility rates, 2010 and 2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Following, are the distribution of women of reproductive ages in the different ethnic groups.

Age distribution of Women

The relative age distribution among all ethnic populations shifted between 2010 and 2018 (see Table 4.2 and Figure 4.10). There is a smaller proportion of young adult Maroon women. Higher percentages of Amerindians women are in the younger reproductive ages.

In general, the changes in the mean age of the fertility age distribution shows a delay in live births. The exception is the ethnic group of the Amerindians, where mean age diminishes due to the concentration of live births at extremely young ages. On the other side, it is worth noting that despite the changes toward an older mean age of fertility, the Maroon women show the smallest change.

Table 4. 2 - Women by ethnicity by relative age distribution in Suriname, 2010 -2018

	Relative Age distribution					
Age	**Indigenous/Amerindian**	**Maroon**	**Creole**	**Javanese**	**Hindustani**	**Total**
		2010				
15	8.3	10.4	6.0	9.2	10.5	9.9
20	22.4	22.5	26.8	22.9	29.3	24.1
25	22.0	22.7	26.9	29.1	33.0	26.3
30	20.5	20.4	21.9	23.6	10.2	19.6
35	17.7	13.0	10.3	15.2	13.4	13.0
40	9.1	9.7	8.2	0.0	3.5	6.4
45	0.0	1.3	0.0	0.0	0.0	0.6
Total	100,0	100,0	100,0	100,0	100,0	100,0
Mean Age	29,7	29,4	28,9	28,1	27,3	28,6
	2018					
15	12.8	7.1	8.4	5.1	9.9	8.0
20	29.0	22.0	23.8	25.9	23.5	24.4
25	24.5	23.3	22.3	29.4	28.5	24.8
30	14.4	19.9	20.7	17.5	19.8	20.0
35	12.1	15.9	17.9	14.2	13.4	15.4
40	7.2	10.2	6.3	7.2	4.9	6.9
45	0.0	1.6	0.7	0.7	0.0	0.6
Total	100,0	100,0	100,0	100,0	100,0	100,0
Mean Age	27,8	30,1	29,4	29,2	28,4	29,2

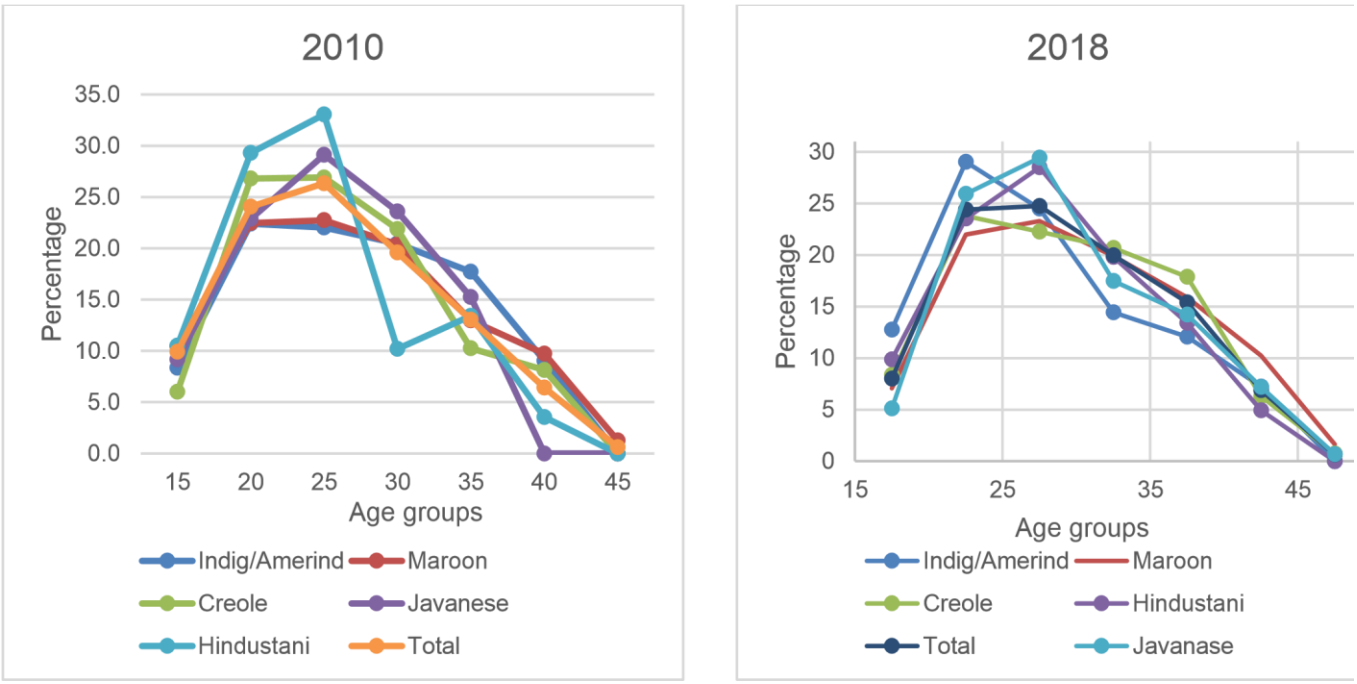
Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Figure 4.10 reveals the remarkable fall, in relative terms, in the age group 30-34 among the Hindustani population in 2010, but this surges in 2018.

The changes in education, marital status, age at first sexual initiation, and fertility noted above reveal that Maroon women are in a transition. Although the level may not have changed significantly, there has been an onset of the age pattern change with a trend to delay births.

One of the mechanisms that help to produce a change in reproductive behavior is the use of contraceptives. The data will show if a change has occurred in the use of a contraceptive method among Maroon women. Furthermore, it will show whether young Maroon women have used more contraceptives than previous generations.

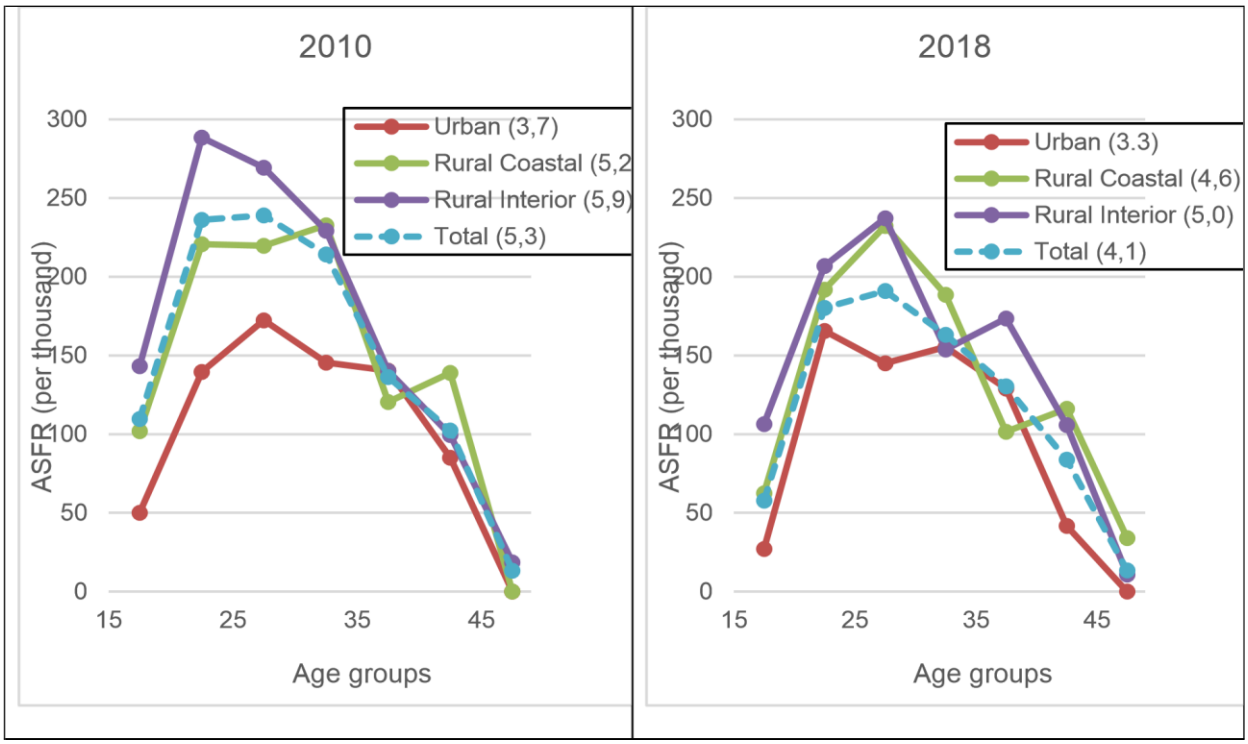
Figure 4. 10 - Age-specific fertility patterns of Women by ethnicity in Suriname (Percent), 2010 and 2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Figure 4.11 indicates that in all geographic areas in Suriname, the fertility rates have changed for the Maroon women from 2010 to 2018. Although the urban area has the lowest rates, the rural coastal area has changed the most in this period. Urban Maroon women experienced a stable TFR during the period 2010 and 2018. Figure 4.11 also shows that the fertility levels of the rural interior Maroon women are declining.

Figure 4. 11 - Age-specific rates (ASFRs) and total fertility rates (TFR) of Maroon women by Geographic area[42], MICS 2010-2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

[42] MICS used settlement types to set up three strata for the sample in the ten districts of Suriname. The urban stratum includes urban areas of Paramaribo, Wanica, Nickerie (Nw. Nickerie), and Commewijne (Meerzorg and Tamanredjo). The rural stratum in the coastal area are the rural coastal areas in the remainder of Nickerie, the remainder of Commewijne, Coronie, Saramacca, Para, and Marowijne. The rural stratum in the interior includes the rural interior areas of Brokopondo and Sipaliwini (Ministry of Social Affairs and Public Housing 2019. Suriname Multiple Indicator Cluster Survey 2018, Survey Findings Report, p. 4).

Maroons in Suriname have a higher TFR compared to the Maroons that are living in Paramaribo (see Table 4.4 and Figure 4.12). Figure 4.12 also displays lower fertility rates in comparison to the estimated fertility rates in the MICS.

There are two aspects to be considered. Firstly, the total fertility level captured by the MICS, particularly that of 2010, is higher than that obtained using the Census, even when this last was adjusted. We believe that given the more careful fieldwork carried out by the MICS, and the survey estimates should be nearest to the real fertility level.

Secondly, accepting the estimates from the two MICS, we can say that after almost a decade, Maroon women are having 1,2 children less, which means a decrease of 23 percent in the fertility level. According to the literature about fertility transition, the Maroon population is in the trail of the fertility transition[43] (Coale, 1986).

There is a peculiar pattern after ages 30-34, where there is not a sharp decline in the ASFR, as what it would be expected after that age group. This is noticeable among women living in the coast (urban or rural) suggesting that this unusual pattern is rather real and not attributable to sample size.

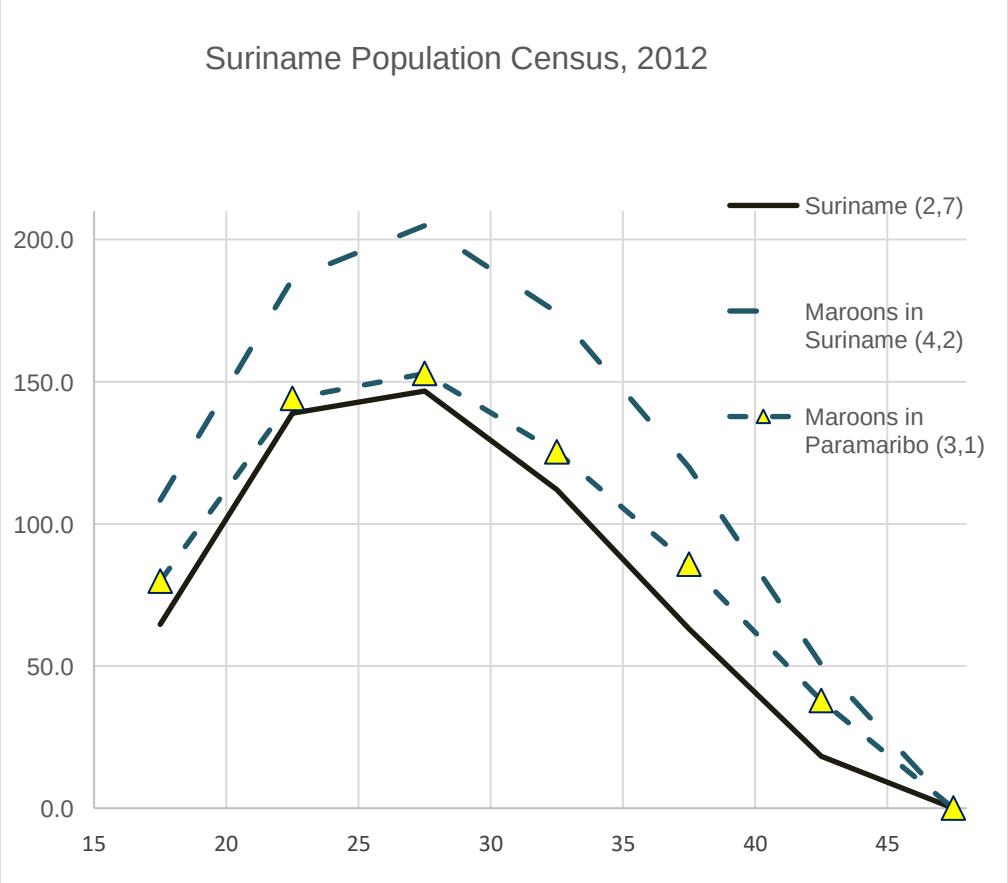
Table 4. 3 - Estimated Age-specific fertility rates and total fertility rates of Suriname, Maroons in Suriname, and Maroons in Paramaribo, 2012- P/F Brass method

Age group	Suriname	Maroons in Suriname	Maroons in Paramaribo
15-19	0.0646	0.1083	0.0798
20-24	0.1390	0.1862	0.1440
25-29	0.1467	0.2049	0.1529
30-34	0.1120	0.1744	0.1253
35-39	0.0631	0.1199	0.0858
40-44	0.0182	0.0505	0.0378
45-49	0.0011	0.0000	0.0000
TFR	2.7230	4.2067	3.1175

Source: Basic data from the General Bureau of Statistics (ABS), Suriname (2018). Table 1 Total number of women and mothers (15-49 years and age unknown) by age group and ethnicity, number children ever born and numbers of births in the past 12 months by age group and ethnicity of the mother, Suriname Population census 2012.

[43] Coale (1986) stated that whenever fertility falls by at least 10 percent, fertility decline has started.

Figure 4. 12 - Age-specific fertility rates and total fertility rates of Suriname, Maroons in Suriname, and Maroons in Paramaribo, 2012 using P/F Brass ratio method



Source: Basic data from the General Bureau of Statistics (ABS), Suriname (2018). Table 1 Total number of women and mothers (15-49 years and age unknown) by age group and ethnicity, number children ever born, and the number of births in the past 12 months by age group and ethnicity of the mother, Suriname Population census 2012. They are received from the General Bureau of Statistics (ABS), Suriname.

Mean parity of women in Suriname in 2018.

Parity shows the number of children a woman has already had. MICS 2010 did not include data on children ever born (CEB). Hence parity is only calculated for 2018.

Table 4.5 and Figure 4.13 depict that parity increases with age. Women between the ages of 15 and 19 have the lowest mean parity among women of all ethnic groups. The low mean parity is understandable because young women are still at the beginning of their reproductive lives. Table 4.4 indicates that the Maroon women had the most substantial parity at ages 25 to 49 compared to women in other ethnic groups. The Amerindians have the second highest but decline significantly at the oldest reproductive age 45-49.

In general, Maroon women have the highest mean parity of 2.55. A Maroon woman has, on average, approximately five children by the end of her reproductive age. Maroon women between the ages 15 and 19 have a mean parity of 0.17 children per woman, while Maroon women at the end of their reproductive ages have, on average, 5.17 children; this is five children more at the end of their reproductive ages.

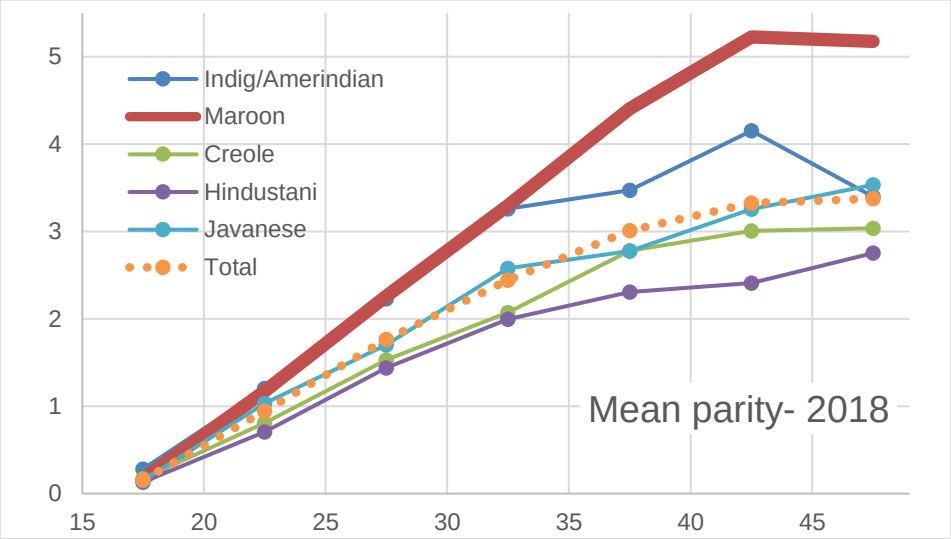
In conclusion, Maroon women have the most significant number of children in all age groups compared to women in the other (main) ethnic groups. They end up their reproductive period, having on average, nearly six children per woman. It is the higher final parity relative to the other ethnic groups.

Table 4. 4 - Mean parity of Women by Age by Ethnic group in Suriname, 2018

Age	Mean parity of Women by Age by Ethnic group in Suriname, 2018					
	Indigenous/Amerindian	Maroon	Creole	Hindustani	Javanese	Total
17.5	0.28	0.17	0.17	0.13	0.15	0.16
22.5	1.20	1.17	0.81	0.71	1.03	0.95
27.5	2.23	2.26	1.53	1.44	1.70	1.77
32.5	3.26	3.30	2.07	2.00	2.58	2.44
37.5	3.47	4.41	2.78	2.31	2.77	3.01
42.5	4.15	5.23	3.01	2.41	3.26	3.33
47.5	3.40	5.17	3.04	2.75	3.53	3.38
	2.30	2.55	1.79	1.64	2.00	1.98

Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Figure 4. 13 - Mean parity of Women by ethnicity in Suriname, 2018



Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

4.2.3 Contraceptive use

Table 4.5 displays that there is, in general, no variation regarding the use of contraceptives among the Maroons. Maroon women have the lowest percentage of contraceptive use compared to women in other ethnic groups. The contraceptive use of women in the other ethnic group has decreased between 2010 and 2018.

Overall, the percentage of contraceptive prevalence among Maroon women did not change. In both 2010 and 2018, the percentage was close to 24 percent.

Contraceptive use among Maroon women is small compared to other women in the different ethnic groups in Suriname. Previous findings contradict this low use of the contraceptive practice. On the contrary, there are improvements in educational levels, higher age at first intercourse, declined fertility, reduced teenage fertility, modifications in union/marriage formation among the adolescents, and a rise in breastfeeding practices.

In sum, contraceptive use among Maroon women is low compared to other women in the different ethnic groups in Suriname. The qualitative data will give possible explanations for this low contraceptive use.

Table 4. 5 - Percentage Women by ethnicity of the household head by currently using a method to avoid pregnancy and variation over the period 2010-2018, Suriname

Percentage Ethnicity of the household head by Currently utilizing a method to prevent pregnancy and change over the period 2010-2018			
	2010	2018	Variation
Indigenous/Amerindian	38.2%	30.3%	7,9%
Maroon	23.6%	23.8%	-0,2%
Creole	34.8%	33.0%	1,8%
Indian	40.4%	39.2%	1,2%
Javanese	53.6%	50.5%	3,1%
Mixed	46.3%	39.3%	7,0%
Others	22.4%	32.1%	-9,7%
Missing/DK	42.9%	35.5%	7,4%
Total	35.8%	30.3%	5,5%

Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

Tables 4.6 and 4.7 display the percentage of contraceptive prevalence of Maroon women in 2010 and 2018. There is a variation in contraceptive practice according to educational level in 2010 and 2018. Furthermore, there is a noticeable increase in contraceptive use among women with no schooling/ early childhood/ pre-primary education. Women who have achieved a higher educational level and no schooling, are using contraceptives more than women with a primary education level.

Women with secondary and higher educational levels have the highest rise in the use of contraceptives. Maroon women use contraception more when the educational level gets higher, which further impacts the fertility level. Increased education exposes women to the knowledge of contraceptive methods (van de Walle & van de Walle, 1993). This access to contraceptive information leads to a higher likelihood of contraceptive use.

The youngest age group 15 to 19, also experienced an increase in educational attainment, triggering the rise in age at a first sexual encounter. Consequently, this results in a decline in the use of contraceptives, which affects fertility leading to a decrease in adolescent fertility/pregnancy.

These social and behavioral changes lead to the postponement in the childbearing, spacing of pregnancies, and, consequently, in lower numbers of children born. As a result of this, the fertility transition takes place.

Table 4. 6 - Percentage Maroon women by Education by Currently using a method to avoid pregnancy in Suriname, 2010

Currently using a method to avoid pregnancy					
Education	**Yes**	**No**	**Missing**	**Total**	**Total (N)**
None	14.5%	85.1%	0.3%	100.0%	598
Primary	24.2%	75.7%	0.1%	100.0%	749
Secondary +	31.4%	68.6%		100.0%	647
Other/Non-standard	31.3%	68.8%		100.0%	16
Missing/DK		100.0%		100.0%	4
Total	23.6%	76.2%	0.1%	100.0%	2014

Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. 2010. MICS4. Available from http://mics.unicef.org/surveys

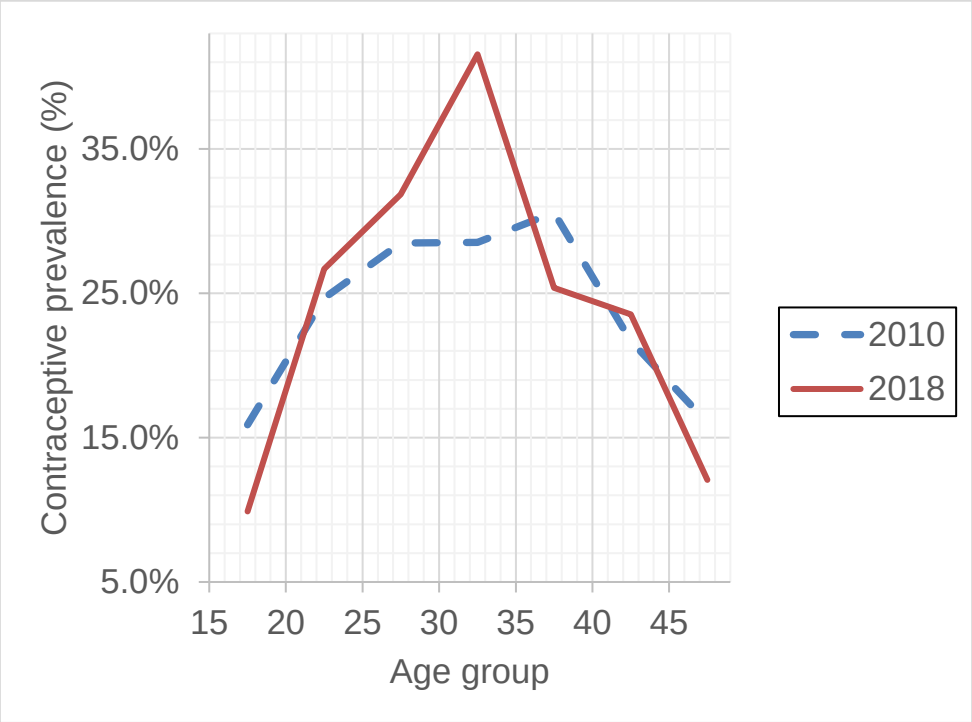
Table 4. 7 - Percentage Maroon women by Education by Currently using a method to avoid pregnancy in Suriname, 2018

Currently using a method to avoid pregnancy					
Education	**Yes**	**No**	**No Response**	**Total**	**Total (N)**
ECE, Preprimary and None	17.9%	82.1%		100.0%	168
Primary	21.1%	78.6%	0.3%	100.0%	346
Lower Secondary	23.4%	76.6%		100.0%	706
Upper Secondary	27.4%	72.6%		100.0%	259
Higher	38.0%	60.9%	1.1%	100.0%	92
DK/Missing		100.0%		100.0%	3
Total	23.8%	76.1%	0.1%	100.0%	1574

Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. 2018. (MICS6). Available from http://mics.unicef.org/surveys

Figure 4.14 illustrates the changes that have taken place regarding contraceptive use among Maroon women in all age categories. For women in the youngest age group 15 to 19, adolescents, the use of contraceptives was less in 2018 (almost 10 percent) compared to 2010 (nearly 16 percent). In 2018 contraceptive prevalence tends to be higher among women at ages 20 to 35.

Figure 4. 14 - Percentage Maroon women by contraceptive prevalence by age, 2010 and 2018



Source: Data set UNICEF. (2018). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

In short, contraceptive use in the various age groups has changed. On the one hand, there is an increase in the use of a method to prevent pregnancy in the age groups 20 to 34, while on the other hand, there is a decrease in using contraceptives in the age categories 15-19 and 45-49.

This age pattern shows that the contraceptive practice is more intense among the middle ages of the reproductive period 20 to 34. Specifically, the age group 30-34 has experienced the highest rise in contraceptives and may continue higher as they go through the end of their reproductive life. There is a notable decline in contraceptive use among women in the 35 to 39 age group between 2010-2018. This pattern may explain why ASFR is still high after this age group.

This intensity in contraceptive practice will result in:

- more efficient use of contraceptive practice;
- postponing childbearing;
- increasing the space of childbearing;
- decreasing the numbers of children born;
- resulting in fertility decline.

Figure 4.15 highlights that contraceptive use of the Maroon women in all geographic areas have shifted among the various age groups. Remarkably is the increase of contraception in the interior. The contraceptive usage among youngest age groups has declined in all geographic areas.

Figure 4. 15 - Suriname- Percentage Maroon women by contraceptive prevalence by age by geographic area, 2010 and 2018

Source: Data set UNICEF. (2018). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

4.2.4 Breastfeeding

Breastfeeding seems to have fertility- reducing effects. Prolonged and intense breastfeeding delays ovulation and menstruation, which in turn postpone conception and thus increases birth intervals. (Bongaarts, 1978; Nag et al., 1980; Coale, 1984).

Table 4.8 indicates breastfeeding practice almost universal and has expanded more between 2010 and 2018. Young women even breastfeed their infants more. The small percentage differences confirm that breastfeeding practice is practically universal without changes over the period. In the case of the 45-49 age group, this may have been influenced by the small sample size.

Table 4. 8 - Percentage of Maroon women by ever breastfeed by age and variation in Suriname over the period 2010-2018

Percentage Maroon women by Age group by Ever breastfeed and variation over the period			
	2010	**2018**	**Difference**
15-19	92.6%	97.7%	5
20-24	92.0%	94.3%	2
25-29	92.4%	97.9%	6
30-34	95.2%	97.5%	2
35-39	93.3%	96.4%	3
40-44	92.5%	96.2%	4
45-49	80.0%	100.0%	20
Total	92.9%	96.6%	4

Source: Data set UNICEF. (2018). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys

4.2.5 Generational differences

Regarding education, younger women, ages 20-29, experienced the highest increase in educational attainment. The rise in schooling is also among adolescents.
The marital age pattern has changed with proportionally fewer young women in any type of marital union. The proportion of young women 15-19 married or living with a partner has declined. Consequently, their counterparts in older ages tend to marry and live with a partner.

Smaller percentages of young women aged 15-19 and 20-24 have a husband who has multiple wives. However, the decrease is among women of all ages.

There is an increase at the age of first sexual encounters among young Maroon women. Maroon women are postponing sexual intercourse to a later age.

Furthermore, the percentage of adolescents who gave birth declined. Complementary, there is a rise in the proportions of women in older generations who gave birth.

The fertility rates of women in all reproductive age groups have decreased. The age specific fertility rates also have significantly declined among young women in the age group 15-19, indicating a decrease in teen pregnancies.

Data regarding the use of contraceptives indicate that the application of methods is lower among the youngest Maroon women (15 to 19 years) and higher among the other young women aged 20 to 29. Data also point out a significant increase in the practice of contraception among older women aged 30 to 35. The pattern suggests that contraception practice may influence fertility levels precisely at the ages where fertility is more concentrated.

Maroon women in all age groups have reported a slight increase in breastfeeding which appears to be universal.

4.2.6 Summary of quantitative results

Various changes have occurred in the period 2010 to 2018 among Maroon women. Education status has improved in all age groups.

Smaller percentages of younger women are living with a partner or are married, and therefore, more young women are reporting that they are not in a union. The risk of getting pregnant thus decreases, impacting, in turn, their fertility level. Polygyny shows a decreasing trend, mainly due to behavior of young women.

The overall use of contraception has not changed, but there are significant changes in the age patterns. Noticeable, the prevalence has increased among the age where the risk of producing a live birth is highest; this age profile may have more impact in the diminishing of the number of pregnancies. Also, the higher use corresponds with the data that shows that women with secondary or higher education have the highest percentages of contraceptive use. relatively high fertility levels by the end of the reproductive period are consistent with the low contraception prevalence after age 35. The practice of breastfeeding was already high in 2010. This custom remains in 2018.

Concerning their fertility behavior, Maroon women give birth at a later age. Their fertility rates have changed remarkably in all ages, but the Maroons still have the highest total fertility rate in Suriname compared to other ethnic groups. Maroon women in Paramaribo have a lower TFR compared to Maroon women in the entire country. Mean parity is also higher in comparison to other ethnic populations.

These quantitative findings are evidence of the social, demographic, and behavioral changes that have occurred among Maroon women between 2010 and 2018 and above all are indicative of fertility changes towards lower levels. The qualitative analysis will further explain these changes.

4.3 Qualitative results

Following table is the inventory of the interviews done for this dissertation.

After the registers are presented, the substantive results of the fieldwork are presented. They include the demographics of the interviewed, their fertility behavior, and the dimensions of the reproductive life that was researched to answer the main question of this dissertation:

- Union formation behavior;
- Contraception practice;
- Postpartum attitudes.

Table 4.2. 1- Socio-demographic characteristics of respondents ages 15 to 29

us	Age	Union status	Education	Religion	Occupation status	Tribe	Age move	Reason move	Age 1st Sex	Age 1st Child	Number Children	Desired Number Children	Number Children Partner
	15	Single	Primary	Moravian	Student	Samaaka						4	
	16	Single	Secondary low	Roman Catholic	Student	Samaaka						1	
	16	Single	Secondary low	Roman Catholic	Student	Mix Maroon						2	
	18	Partner	Secondary low	Traditional	No	Mix Maroon	5	Other French-Guyana	18		Pregnant	1	
a	18	Boyfriend	Secondary high	Roman Catholic	Student	Mix Maroon			17			2 or 4	
	18	Partner	Primary	Pentecostal	No	Samaaka	0	Parents	16	17	2	3	2
	19	Boyfriend	Secondary high	Roman Catholic	Student	Matuarier	0	Parents	18			2	
	20	Partner	Secondary low	Pentecostal	Yes	Aucaan			16	16	2	4	3
	22	Boyfriend	Secondary high	Pentecostal	Student	Aucaan			18			2 or 3	
	24	Single	Secondary high	Pentecostal	Yes+Student	Samaaka			18			4 to 6	
	24	Single	Secondary high	Moravian	Yes	Aucaan			18	21	1	2 to 3	
	24	Boyfriend	Secondary high	Pentecostal	Student	Aucaan			17	19	1	4	2
	26	Married law	Secondary high	Pentecostal	Yes	Aucaan	8	Study	26			7	1
	29	Boyfriend	High	Pentecostal	Yes	Mix Maroon			21			3	4
	29	Married law	Secondary low	Pentecostal	Yes	Samaaka	13	Parents	17	18	3	3 to 4	2
	29	Partner	Primary	Roman Catholic	Yes	Pamaaka			13	16	3	5	1

Table 4.2.1: Sociodemographic characteristics of respondents ages 30 and above

Name fictitious	Age	Union status	Education	Religion	Occupation status	Tribe	Age move	Reason move	Number Children	Age 1st Sex	Age 1st Child	Desired Number Children	Number Children Partner
Nala	30	Married tradition	Secondary high	Pentecostal	Student	Samaaka	15	Study	2	16	20	4	2
Feechi	31	Partner	High	Pentecostal	Student	Aucaan			3	18	21	4	1
Niah	32	Married tradition	Secondary low	Moravian	No	Samaaka			3	15	22	No more country	6
Semira	32	Married tradition	Secondary low	Traditional	No	Aucaan	2	Other - Aunt	7	17	17	God	9
Maaza	33	Single	High	Pentecostal	Yes	Aucaan				17		3	
Arjana	38	Partner	Secondary high	Pentecostal	Yes	Aucaan			3	16	18		
Zizi	38	Single	Secondary low	Roman Catholic	Yes	Aucaan	10	Study	4	14	15	more	2
Imena	39	Married Law+ Tradition	High	Roman Catholic	Yes	Samaaka			4	13	23	More but medical reason	4
Makena	40	Married Tradition	Secondary low	Roman Catholic	Yes	Samaaka	5	Parents	8	13	18	5	14
Fayola	41	Partner	Secondary low	Pentecostal	Yes	Aucaan	9	War	3	16	25	3	3
Tabia	42	Single	Primary	Roman Catholic	Yes	Aucaan	11	War	3	16	17	No more	
Ebele	43	Boyfriend	High	Pentecostal	Yes	Aucaan	11	War	2	20	21	3	
Kesia	43	Partner	Primary	Pentecostal	No	Aucaan	4	Other-Aunt	2	15	18	more	1
Lesedi	44	Married Law+ tradition	Secondary low	Pentecostal	Yes	Aucaan			6	17	20	2	10
Zola	44	Partner	Primary	Moravian	No	Samaaka	Don`t know	War	7	15	18	No more	uncountable

Table 4.2.1: Sociodemographic characteristics of respondents ages 30 and above

Name fictitious	Age	Union status	Education	Religion	Occupation status	Tribe	Age move	Reason move	Number Children	Age 1st Sex	Age 1st Child	Desired Number Children	Number Children Partner
Neema	45	Married tradition	Primary	Traditional	Yes	Aucaan	-	-	7	14	15	less	4
Desta	45	Partner Not living	Secondary low	Roman Catholic	No	Aucaan			6	19	20	3	7
Mudiwa	50	Widowed tradition	No school	Traditional	Yes	Aucaan	16	Other-Husband	12	16	17	More but widowed	
Sheena	55	Married tradition	Primary	Pentecostal	Yes	Aucaan	3	Parents	7	15	15	4	7

4.3.1 Demographics of respondents in qualitative research

The results of the qualitative data analysis of 16 women aged 15 to 29, 17 women aged 30 to 49, and 2 women 50 years and older follow in this section (see Table 4.2.1).
The largest number of the respondents professed the Pentecostal religion (17), followed by the Roman Catholic faith (10). The remaining respondents professed either the Moravian (4) or the Traditional belief of the Maroons (4).

Furthermore, most respondents (12) had attained lower secondary education, followed by respondents who have achieved upper secondary (9) school. Some respondents (8) had completed primary training. A small number (5) had reached a high education (University level). One respondent had no schooling.

Most respondents (18) are working, whereas nine are full-time students at the time of the interviews. One respondent is a student and is also working part-time. Some respondents (7) were not working.

The place of birth for most respondents (23) is Paramaribo. Some women were born in the other districts in Suriname, namely Sipaliwini (4), Brokopondo (4), and Marowijne (4). These districts have the highest number of Maroons in Suriname.

The data tell the following, regarding the tribe that respondents belong to; most respondents (18) are of the Okanisi/Ndyuka tribe, followed by the Saamaka tribe (10). One respondent is of the Matawai, and another respondent is of the Pamaka tribe. Some respondents (4) reported that they were of mixed ethnicity. When asked further, they revealed that one of their parents is from another Maroon tribe. In two cases, the other parent is either Creole or Amerindian. Maroons acknowledge someone as a Maroon when the mother is a Maroon. Two respondents, who have a Creole or Amerindian parent, were also speaking in one of the Maroon languages during the interview. One of the respondents had to translate from Sranan to the Maroon language for the other because the other respondent did not communicate in Sranan. She was fluent in the Maroon language and French (as explained in the Methodology chapter).

Regarding marital status, most respondents are not married (24), legally nor traditionally. Some are married according to their tradition (6), and some are married according to the law (4) in Suriname (legally). Three of the lawfully married respondents are also married traditionally. They had a traditional marriage first, and later they were married according to the law. One respondent is a widow but was married according to the Maroon marital traditions.

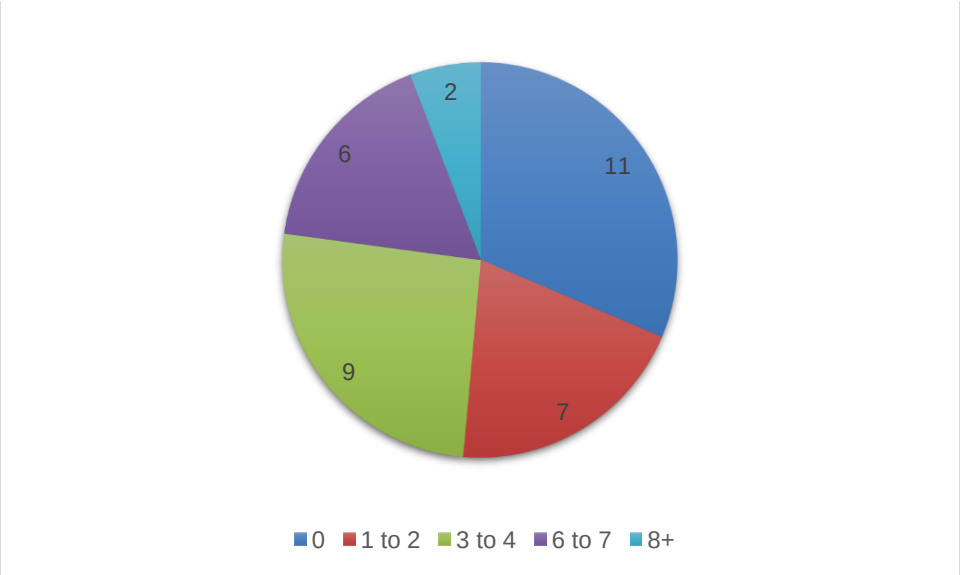
Furthermore, data show that those who are not married; most are single (8), seven are in a relationship (boyfriend/visitant). Some are living with a partner (5). Some respondents reported that they have a partner but do not live together. The reason being that some partners are working in the interior in Suriname or abroad.

Five respondents were sexually active between the ages of 13 to 14. Most of the respondents (17) had their first sexual experience between the ages 15 to 17, followed by some (7) who had their first sex between ages 18 and 19. A few respondents (3) had their first sexual encounter above age 20. Also, a few respondents (3) never had sex.

Respondents by the number of children

Figure 4.2.1 specifies that many respondents (11) do not have children yet, although all of them have expressed their wish to have children in the future. Many of these respondents were young and still in school; this explains why part of the respondents do not have children yet. Some respondents (9) have three or four children, and some (7) had one or two children. Several respondents (6) had six or seven children. A few respondents (2) had more than eight children; the highest number is twelve children.

Figure 4.2. 1 - Number of respondents by the number of Children

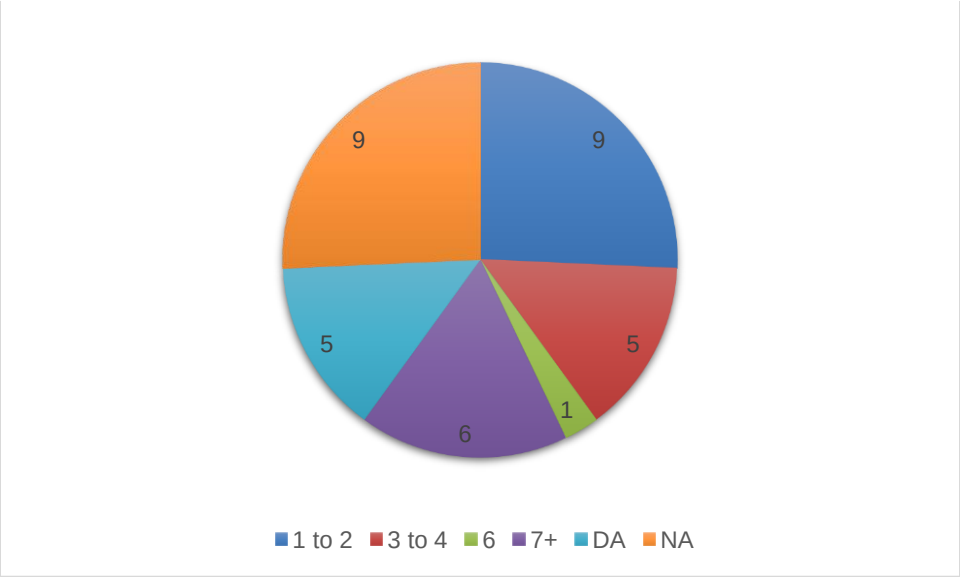


Source: Raw data from the fieldwork

Husbands by the number of children

Figure 4.2.2 indicates that most respondents (9) did not know (or did not respond) the number of children of the husbands/partners. Several respondents are single and, therefore, could not respond to the question when asked how many children the husband/partner has. Of the respondents who reported that their husbands/partners had children, some (5) mentioned that their husbands/partners have one or two children, and some (5) said that the number of children their husbands/partners have is three or four. Most respondents (7) indicated that their spouse has six or more children. The highest number of children mentioned by a respondent was that her husband has numerous children (“uncountable” as she expressed it).

Figure 4.2. 2 - Number of husbands by the number of children



Source: Raw data from the fieldwork

Respondents by reason for migration

Reasons, why respondents migrated to Paramaribo, were because of the Civil War[44] (5), parents migrated for labor (5), and respondents wanted to continue their study (3) (see Figure 4.2.3). Some respondents migrated for different reasons as a child (very young age); a relative who lived in Paramaribo wanted to be their foster parent, so they were brought up by the relative. One respondent migrated with their parents to French-Guyana. At the time of the interview, this respondent was in Paramaribo (her birthplace). Many respondents were born in Paramaribo, and therefore, this information was not necessary. One respondent who is born in Paramaribo also has lived for some years in another district where the Maroon population is high. A few respondents (2) moved to Paramaribo when they were a baby (0 years); the mother of one respondent went to the interior to

[44] The Civil war occurred from 1986 to 1992. It was waged in the Interior region of Suriname. Maroon and Amerindian guerrillas fought against the National Army.

have her baby and returned after childbirth. The mother was already living in Paramaribo before the respondent's birth.

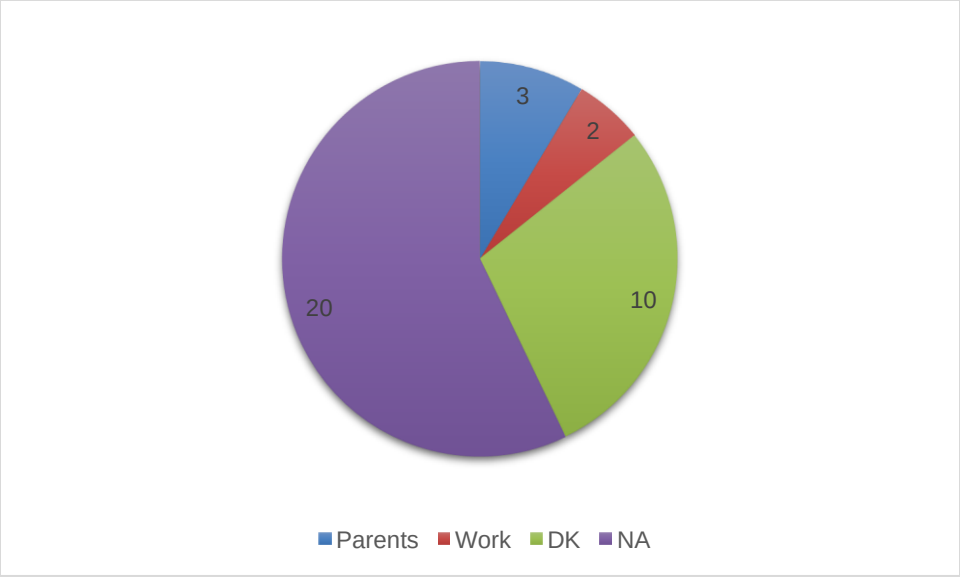
Figure 4.2. 3 - Number of Respondents by Reason for Migration

Source: Raw data from the fieldwork

Husbands by reason for migration

Figure 4.2.4 specifies the reasons why husbands/partners migrated to Paramaribo were because of parents (3) or for work (2). Respondents noted that these men were brought to Paramaribo at a young age with their father or to work. Most respondents (9) did not know (or did not responded) why their partner had moved to Paramaribo. Missing answers are from respondents without a partner/boyfriend.

Figure 4.2. 4 - Husbands by reason for migration

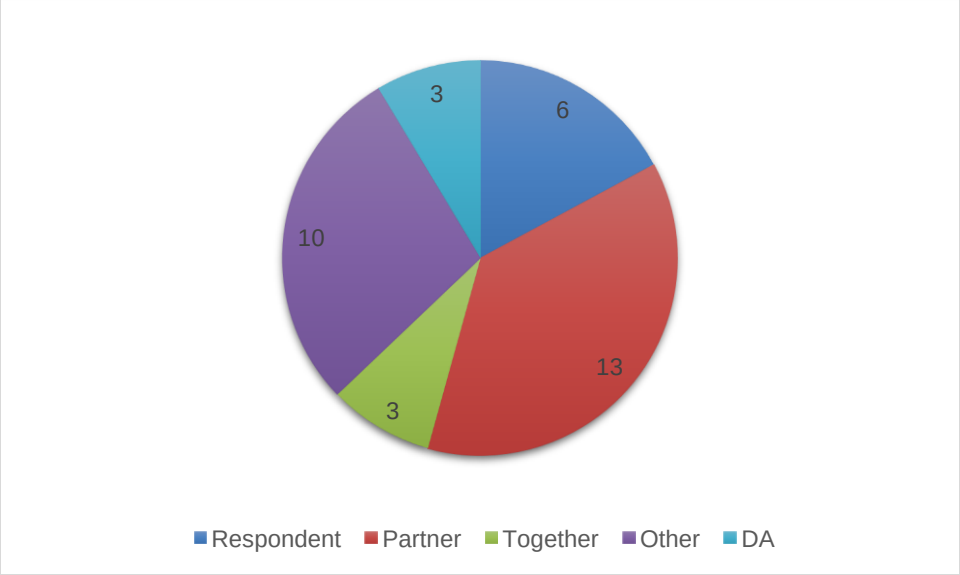


Source: Raw data from the fieldwork

Respondents by the source of breadwinner

Figure 4.2.5 shows who the household breadwinner is. Most respondents (13) said that their partner is the breadwinner in the house. The “other” category is of respondents who still live with their parents (10). Although some of these respondents are working, they reported that their parents are the breadwinner in the household. Several respondents (6) said that they are the breadwinner, mostly because they live alone or take care of almost everything in the house, and the husband/partner is contributing. A few (3) said that they and their husbands/partners are the breadwinners in the family. A few respondents did not respond.

Figure 4.2. 5 - Number of respondents by a source of breadwinner



Source: Raw data from the fieldwork

Considering that focus of the dissertation is on reproductive behavior, the following tables give an overview of women's profiles related to, specifically, this aspect. Table 4.2.2 shows their reproductive preferences. Among these women, it is frequent to find that they are satisfied with the number of children they have. There are cases where, also, they desire more children, disregarding their age.

Table 4.2. 2 - Respondents by number of children and the desired number of children by age and marital status

Number of children		**Age**		**Desired Children (related to those already had)**		**Marital status**	
Up to 2	7	Under 30	4	More	4	Married	
						Not Married	4
				Less		Married	
						Not Married	
		30 or more	3	More	3	Married	1
						Not Married	2
				Less		Married	
						Not Married	
More than 2	17	Under 30	2	More	2	Married	1
						Not Married	1
				Less		Married	
						Not Married	
		30 or more	15	More	5	Married	4
						Not Married	1
				Less	6	Married	4
						Not Married	2
				Same	4	Married	1
						Not Married	3
Total	35		35		35		35

Source: Raw data from the fieldwork

Table 4.2.3 shows the distribution of women according to their age at sexual initiation, educational level, and use of contraception. In general, women interviewed report higher contraception practices among those with higher education.

Table 4.2. 3 - Women and number of children according to education, age at first intercourse, contraception practice, and age

Characterization of the sample - Women and number of children according to education, age at first intercourse, contraception practice, and age									
Number of children		**Education**		**Age at first intercourse**		**Use of Contraception**		**Age**	
Up to 2	13	Low	3	Under 18	3	Yes		Under 30	
								30 or more	
						Not	3	Under 30	
								30 or more	
				18 or more		Yes		Under 30	
								30 or more	
						Not		Under 30	
								30 or more	
		Secondary +	10	Under 18	4	Yes	3	Under 30	3
								30 or more	
						Not	1	Under 30	
								30 or more	
				18 or more	6	Yes	2	Under 30	2
								30 or more	
						Not	4	Under 30	
								30 or more	
More than 2	16	Low	5	Under 18	5	Yes	3	Under 30	3
								30 or more	
						Not	2	Under 30	
								30 or more	
				18 or more		Yes		Under 30	
								30 or more	
						Not		Under 30	
								30 or more	
		Secondary +	11	Under 18	9	Yes	6	Under 30	5
								30 or more	1
						Not	3	Under 30	
								30 or more	
				18 or more	2	Yes	2	Under 30	1
								30 or more	1
						Not		Under 30	
								30 or more	
Total	35		35		35		35		35

Source: Raw data from the fieldwork

The fertility behavior and values of women rely on the cultural setting of the society or cultural milieu where socialization and value formation took place. Thus, the reproductive attitudes, perceptions, and motivations of a person depend on the social context in which one grew up (Isiugo-Abanihe, 1993).

The TFR of the Maroon population declined in 2018 but remained high as opposed to other ethnic groups in Suriname. Maintaining this relatively high fertility rate may lie in their reproductive attitudes and values.

The qualitative findings explain the fertility attitudes and behavior of the respondents concerning children, divorce, polygyny, marriage, choice of partner, sexual initiation, contraception, and postpartum practices. The information about the attitudes of the husband/partner, family/lineage, religion, and culture provided by the respondents will indicate if these are a source of influence. These findings help understand 1) why the TFR is relatively high compared to the other ethnic populations and 2) the change in the TFR of the Maroons. It is worth to emphasize that due to its nature of being a qualitative analysis that these statements/explanations only concern this group of respondents in the urban region of Suriname; more specifically, those living in Paramaribo and Wanica.

4.3.2 Fertility behavior

In this section, respondents talked about the value and preference of children within the Maroon society. Furthermore, social institutions such as the family/lineage, culture, and religion that might have an impact on their fertility behavior.

The codes ‘importance of children’ for women, husband/partner, and family, describes why children are essential. If children are necessary, it can motivate these women to have children.

Another code is ‘child preference.’ When sex preferences of children exist, this can affect fertility and reproductive behavior leading to reducing the number of children. The variables ‘women’s preference for boys’ and ‘women’s preference for girls’ indicate that children of both sexes are vital to the respondents.

Next are the codes ‘husband’s expectation for children’ and ‘family’s expectation for children’ and ‘religious/cultural attitude concerning children’ that may encourage or discourage the respondents from having children.

The code ‘reproductive decision-making’ points to the autonomy or dependence of the respondents in making reproductive decisions.

Lastly, the codes ‘women’s reason for wanting (more) children’ and ‘women’s reason for not wanting (more) children’ reveal the impact on the childbearing outcomes.

Importance of children for Women

Respondents noted several reasons why they find it necessary to have children. Reasons such as company, offspring-reproduction, positive feeling, progress/transfer of culture, support/social security, value/wealth, God, not essential to have, were mentioned.

Several respondents (7) stated that if there are no children, you are alone. Children give you company.

“*And if you have no children, you are alone. So, having children not only as insurance for the future that they go to work and take care of you, but it is also an assurance that you will be less lonely. And if you have no children, especially within the Maroon community, you are lost. At a given moment, you are just lonely. And if you see it early, you help raise other children. Or you take other children to raise. And they then become your assurance of a somewhat joyful future with people around you.” (Imena, 43 years, Roman Catholic, High education)*

“Because my husband is not there, then I would have been home alone, but now I’m with those three children. I feel so good.” (Fayola, 41, Pentecostal, Secondary low)

Few respondents (3) indicated that they find children essential because God said to multiply, that children are a gift from God and that God is the One who determines when you have children.

Well, if I can look at it a little biblically. God created us to multiply Him. So, we must have children. We need to increase. And as a Christian, you should get married when you serve God. Or you must stay single, but you cannot live in concubinage. Having children is a gift from God. (Falala, 26, Pentecostal, Secondary high)

“Because God has said: “go and multiply.” (Hasani, 24 years, Moravian, Secondary high)

You can have children unexpectedly because it is God who determines. (Neema, 45, Traditional, Primary)

Another respondent did not find children necessary. She had her first child because of curiosity. She is a young respondent who had two children at the time of the interview.

“Hmm, it is not important. On my part is curiosity. I see other people making children. Then I say one day let me try once because I wanted to see what it is, how those people feel. I got pregnant.” (Binta, 18 years, Pentecostal, Primary)

Many respondents (9) mentioned that children are essential to produce offspring or to make the family bigger.

One respondent believes that if you have children, you leave your offspring when you die. Others stated that when someone stops having children, the reproduction stops. There is no continuation of the person or family. Children, on the other hand, are also crucial to expand the family.

“Because if I were not born, I would not be here. If my mother had not gotten children, we would not be here. If my grandmother had not gotten children, we would not be here.” (Kesia, 43, Pentecostal, Primary)

“For our people, if you do not have children, then it is like you stopped there. Do you know what I mean? So that means I have no children, and then if you do not have any children, nothing works out for you. You do not have. You cannot have grandchildren. Nothing, nothing. Then you are alone.” (Niah, 32 years, Moravian, Secondary low)

“Your generation. Somebody has left a child for posterity. This shows that someone is no longer in our midst.” (Maaza, 33 years, Pentecostal, High)

“The family gets bigger. Thus, there are more descendants in the family of your parents.” (Subira, 18 years, Traditional, Secondary low)

One respondent indicated that children are essential for the transmission of the culture.

“It is crucial that a woman has children for the transfer of culture. The girl maintains the progress of your tradition.” (Maaza, 33 years, Pentecostal, High)

A majority (16) stated that children are essential for social security/support, especially in old age or when they are sick.

I find it essential. Tomorrow those children will take care of you. Children must be there. They are important, yes. I needed them. (Dayo, 29 years, Pentecostal, Secondary low)

"If I have my child when he grows up, he can take care of me." (Mudiwa, 50 years, Traditional, No schooling)

"It is important, nevertheless. For example, I find it important because you have people to help you. You need people to help you. So, if you don't have children then you have to go to people every time to bother them, can you help with this or that, but if you have children or so we can communicate." (Saana, 22 years, Pentecostal, Secondary high)

"And later when the children are older, they are working, or you get sick later, even if you are not old yet, a certain illness comes. Even if the child is five years, he will help you because maybe you cannot even get up to have some water. He can get the water for you." (Tabia, 42 years, Roman Catholic, Primary).

Other respondents (9) explained that having children make them feel good. The positive feeling that children give also signifies the value of children.

"Because I am alone. So, having children for me, I see them as my sister or brother. I can play with them. Because sometimes you are full of stress and then that child comes, makes you happy." (Amina, 20, Pentecostal, Secondary low)

"Honestly, I love kids. And children bring joy. In a family also if you have children. So, it seems to be quite different. I do not have yet, but it seems to be a little cozier in the house. A little busier." (Falala, 26, Pentecostal, Secondary high)

"I knew in the first instance. I thought, why do I have children? I thought because I could not be free. I could not go anywhere. Who would I find to look after my children? It restrains you. You see that someone else can go to school, and I could not go to school anymore because I had to watch those children. But now, at this age, I am thankful to God that I have found a good job that I can look after my children. I am glad and proud because you see your children grow. Things that you could not have done, you can do for your children. And I am thankful that I began early. You see, children grow. Yes, it is essential. It feels nice when those children can say, "Mama, I got a ten." [she means that when the child receives a high grade for a course in school, it makes her happy and proud]. You feel happy. I mean is this motherhood. It's a nice feeling." (Wina, 29, Roman Catholic, Primary)

"And I personally love children. So, that's why I entered education because I was studying economics." (Feechi, 31, Pentecostal, High)

"Why? Because without children, you are not happy, I think. So, I find it essential because, without children, you really cannot be happy." (Nala, 30, Pentecostal, Secondary high)

Some respondents (7) also said that children are your wealth or give a woman value. Wealth, according to one respondent, means children can help you. “If you are sick, you can say get some water for me. Do this or do that. If you have children, you have value as a woman.”

“But with us, they say with us Maroons that is your wealth (“Nah joe goedoe”). When you have many children, it is your wealth.” (Desta, 45, Roman Catholic, Secondary low)

“What kind of wealth do you may have, if you do not have children, you don’t have value. That is how I see it when you have children. You have value.” (Mudiwa, 50 years, Traditional, no school)

The statements reveal that among these women, children tend to be a value. None of them, even among the youngest, reported children as a burden.

Child preference for Women

Many respondents (23), both with or without children yet, indicated that boys and girls are welcome. Some stated that they preferred a proportional number, mostly two boys and two girls.

This response can explain the preference for both male and female children: “*In the interior, you need girls and boys.” (Makena, 40, Roman Catholic, Secondary low)*

“I always wanted two girls and two boys, a pair. Now I have two girls and one boy.” (Dayo, 29, Pentecostal, Secondary low)

“I wanted a proportional number. But I have more boys. I have one girl and three boys.” (Imena, 39, Roman Catholic, High)

“I wanted boys and girls. I want another girl. I wanted two boys and two girls.” (Zizi, 38, Roman Catholic, Secondary low)

Five respondents mentioned that it does not matter what the gender of the child is.

“It doesn’t matter. What God has given me; with that, I am satisfied.” (Nala, 30, Pentecostal, Secondary high)

“I don’t have a preference for girls or boys if they are healthy.” (Maaza, 33, Pentecostal, High)

"it does not matter. I have two girls and a boy. When I was pregnant, I wanted to have a boy, and now I have one, so, then I'm done." (Niah, 32, Moravian, Secondary low)

"it does not matter. Everything is welcome." (Zuri, 29, Pentecostal, High)

Only one respondent said that she would like to have only a boy.

Some participants (5) prefer more boys or another boy because they already had a few girls.

"I wanted to have another boy, but unfortunately, I did not succeed." (Lesedi, 44, Pentecostal, Secondary low)

Respondents prefer a sex mix, but they have specific reasons why they want a boy child and a girl child. These women desire an equal number of daughters and sons. The data indicate that reasons for having a girl or a boy differ between young and older respondents, as explained below.

Women's Preference for boys

Some respondents (8) indicated that in the Maroon community, boys/men make decisions. One young woman mentioned that she would like to have a boy to decide whether her daughter should do something. The other seven respondents are in the older age groups. Men are in authority; the transference of the leadership of a tribe goes to a man (Gaaman). Men are necessary for certain traditional rituals. Men decide, for example, what the date of the funeral is of a dead family member. Even in the household, boys/men seem to be in authority.

"It is essential to have boys only with the transfer of traditional authority. It was a man's world in the past. Nowadays, you have female captains. Only the Gaaman is for life as a traditional leader.

The men can mediate in quarrels or conflicts. Men are traditional leaders." (Ebele, 43, Pentecostal, High)

"With the Maroons, with the tradition in the interior, you must have men, sons. If you do not have sons, then you are worthless. But you must have a son and how I do not have [she means that

she does not have brothers]. When something happens to me, I cry because I don't have a brother." (Sheena, 55, Pentecostal, Primary)

"Yes, they also say if someone died, for example. They say that girls do not have much to say. The men must decide what should happen." (Feechi, 31, Pentecostal, High)

"So, it's necessary to have a boy. Let us say with us Maroons it is the man that talks for the "osu." For example, if there is a problem, then he speaks for the home and so on. Female children cannot do certain things. Only men can do certain things. So, it is men that do more. Even if it is a boy, but when he is big, he must speak for you also, if you are an adult, even if you are not mature. Males are above the female children. (I: And the girls? What do the girls mean?) R: The girls mean, how can I explain to you? The girls make sure they cook and so on. For example, someone dies. It is the female child that decides that we must cook. They must do certain things. But the men they will say, such a day we must have the funeral. So, they determine that it should be so. For example, these are my children. How should I explain it? Then my boys will decide for me, for my sister's child. For instance, they will go to do "aksi samaa" for a child of my sister. So, that is how it is. Let's say it is men who have more to say in our culture." (Semira, 32, Traditional, Secondary low)

"I want to have more boys to slap those girls because they are sometimes naughty. If I should have two children, a boy then a girl. If that girl is naughty or wants to go out with friends whenever I talk to her, then if she does not listen, I have a boy who says, "no, you stay at home." (Sanaa, 22, Pentecostal, Secondary high)

Another reason that was mentioned by a few respondents was that boys could take care of their mothers.

"They give you money. Boys can take care of the mother, but the girl not. But you as the mother must take care of the girl." (Binta, 18, Pentecostal, Primary)

A few respondents (3) said that there are not enough boys/men in the family; therefore, they need more male children.

A few respondents (2) declared that boys could also do household chores like girls.

"Boys also. Because my boys wash their clothes, and they cook." (Kesia, 43, Pentecostal, Primary)

One respondent mentioned that she wants to see what it is like to raise a boy.

"Because I also want to see what it's like to raise a boy. And, also, to know how a man should be." (Hasani, 24, Moravian, secondary high)

One respondent pointed out that she feels safe when there are boys in the house.

"Well, you know when you have boys, you feel much safer. Especially when they have gotten a little older, for example, you feel a lot safer in the house. And that girl, she is going to help you with the housekeeping and other things. You can also talk to your girl more freely about certain things." (Falala, 26, Pentecostal, Secondary high)

Women's Preference for girls

Respondents preferred girls for other reasons than those of boys. Girls are needed for offspring-reproduction, support, but also to teach her household chores or to be able to do other things such as braiding her hair.

"Because your boys are just like what is written in the Bible, leave your home. So, they go. And they have children with other women, but they are not your children. The children are for another family. Girls ensure your offspring. And if you have too few girls, then you have too few people around you. Because if that one leaves, then you have nothing left." (Imena, 39, Roman Catholic, High)

"Girls are important for the progress of life. The girl maintains the progress of your tradition. She is your wealth. She takes care of the reproduction, expansion of the family." (Maaza, 33, Pentecostal, High)

"I see it with my son. I have a son of 22 years. Ok, he is living on his own already. And even if I call him, I feel sick or what, then I see him only after 2 or 3 days. While my daughter is there for me, she keeps supporting me. I can trust her blindly with everything. It is not that I rather wanted girls because I am so happy with my son. I am so proud of him. You know 22 years, and he lives already independently. But with me, girls stay sooner than boys." (Arjana, 38, Pentecostal, Secondary high)

"To do certain things, to teach to cook, to teach to wash clothes, to teach to sweep the house, to teach household things." (Kesia, 43, Pentecostal, Primary)

"I wanted a girl to do all kinds of things for her, such as braiding hair." (Binta, 18, Pentecostal, Primary)

Respondents want children for gender-specific reasons. Girls and boys have specific gender roles.

Religious/Cultural attitude concerning children

Some respondents (9) who professed the Christian belief when asked what their religion says about having children, indicated that God spoke to multiply. However, a few mentioned that if you increase, you should also be able to take care of those children. Therefore, one must know how they can take care of many children. One respondent mentioned that children are a blessing.

"It is written in the Bible, 'go and multiply.' The whole day Pastor B is saying go and multiply. Pastor B is increasing, so he wants his sheep also to grow." (Kesia, 43 years, Pentecostal, Primary)

"Yes, God said, 'go and multiply.' Once you are married, you can have children." (Zuri, 29 years, Pentecostal, High)

"It's essential. God said, 'go and multiply.'" (Lesedi, 44 years, Pentecostal, Secondary low)

"But if you multiply, you should also be able to take care of it and do not leave it to the government ["it" refers to the child]. So that is why I said no. Look, I am the mother, so I need to make sure that you get everything on time. And do not come with a team ["elftal," she means football team, i.e., eleven children] on television, and you cannot take care of the children. Why did you get the children then? Why did you not think about the pill? So, that is why I say no. (Arjana, 38 years, Pentecostal, Secondary high)

Hmm, yes, children are permitted. I mean, it is something from God. Of course, you need to know how you are going to take care of them. Then how much do I want, and how am I going to take care of that amount? For example, suppose I want two, it is acceptable. I can still set the limits and say I can buy the same for both. (Anaya, 24 years, Pentecostal, Secondary high)

There were also some (5) who said that they do not know what their churches say. These were respondents of all religious denominations included in the research.

One respondent mentioned that the church does not talk about it, but that she believes that one may have children since she sees that Christians have a lot of children.

"You may have children. It is not a problem. They did not tell me, but I see that they have a lot of children. But they do not talk about it. You can have children." (Sanaa, 22 years, Pentecostal, Secondary high)

One respondent indicated that the church said, "*You must be sweet to your child. You must not abuse your children." (Deka, 16 Years, Roman Catholic/Pentecostal, Secondary low)* One

respondent said that the church finds that you should practice family planning. *"You must plan to have a family." (Makena, 40, Roman Catholic, Secondary low)*

On the other hand, some respondents said that the family or culture sees children as wealth, value, or expanding the family.

"*When you are a woman, and you did not get children, you have no value. People will see that you are nothing. When you have children, then people see you. You have value." (Mudiwa, 50 years, Traditional, no school)*

"Well, you must have children. Within my culture, you must have children, and that is that wealth of those Maroons. You must have children. That is value for them to have children. Today or tomorrow, they become somebody in society. Because, look if you get a child in the interior, especially a boy can have a fish boat, and sell fish. A man can have an excavator for gold, so, all that sort of thing, you know so that they can take care of their mother. If you have a boy, he can go hunting. He can get meat to sell. So, all that sort of thing. Now, with that progress, if you have boys, for example, and four of those boys are educated than it is wealth already." (Wina, 29, Roman Catholic, Primary)

Religion, both Christian and Traditional religion, has a positive attitude/view concerning children/fertility but from different perspectives. Respondents, therefore, have positive stimuli from religion and culture that can encourage them to have children.

Reproductive decision-making

Most respondents decide when they want a child and how many they would like to have. Although some respondents said that the husband leaves it up to them to choose, the responses clearly show that the women decided. A few said that they both decided to have children. Some respondents did not plan their pregnancies; they had not used contraceptives.

Some respondents (7) reported that they make the decision concerning children.

"I decide because I get pregnant, he does not." (Nila, 24, Pentecostal, secondary high)

"More together, but I think as I see it, he left that part more to me. If I think I am ready, then it happens. And if I think we should wait, well, then we wait. But in this case, we do not get anymore. So, he finds that too bad." (Imena, 39, Roman Catholic, High)

“No, he always leaves it up to me. He says I must determine that for myself. He always told me he wants five. He always jokes, ‘I want five or six.’ Because he knows I am not going to do it. I also never asked. For he already knows even if he wants, he is not going to be able to determine. My health, I must decide it myself. So, I do not think that man is going to choose. You must feel, I can, or I cannot. He leaves it to me.” (Dayo, 29, Pentecostal, Secondary low)

Sometimes the husband (5) is the one who makes the decision.

“I sat with my man and then he said to me it had been long already because I am big enough and I want a child now. That is the first. I want a child because then with us Maroons, if you do not make a child for that man or so, one, two, let me say a few years then that man leaves, so yes. And I often said I want a sister and so because my mother only has me. So, then I always said I want a child now because I see her as my sister. So, I do not see her as my child. I see her as my sister.” (Amina, 20, Pentecostal, Secondary low)

“He decided to have a second child because he found that he had waited too long for a baby.” (Nala, 30, Pentecostal, Secondary high)

A few (2) mentioned that they and their partners/husbands decided to have children.

“We decide together.” (Lesedi, 44, Pentecostal, Secondary low)

We have already decided. He [the boyfriend] wants two, but I want four. We are going to have two, but when it is not equal yet, we are going to have more.” (Morowa, 18 years, Roman Catholic, Secondary high)

Some respondents (5) stated they did not plan their pregnancies. Data indicate that the use of a contraceptive starts mostly after having a child.

“With my second relationship, he wanted a child, but the first two were unintended pregnancies.” (Arjana, 38, Pentecostal, Secondary high)

No, I did not know, but when the man and I were living, we had intercourse, then the pregnancy came.” (Zola, 44, Moravian, Primary)

No, it came suddenly.” (Wina, 29, Roman Catholic, Primary)

Women are able and allowed to make decisions when it comes to reproduction.

Husband's expectation for children

Most respondents (19) stated that their husband/partner wants to have children. One respondent finds that her partner does not want any more children.

"He wants to have seven children. He has two already." (Nila, 24, Pentecostal, Secondary high)

"My husband wanted more. We just agreed that we wanted one more. We will try." (Zizi, 38, Roman Catholic, Secondary low)

However, one respondent indicated that her partner does not want more children.

"He is satisfied with two, he says. He does not want anymore." (Binta, 18, Pentecostal, Primary)

Husbands/partners are positive stimuli to encourage having children.

Importance of children for a husband

Some respondents mentioned that their husbands/partners wanted children for offspring or social status. A few said that their partners love children. A few did not know how the husband thinks about having children. One respondent indicated that the husband wants children, but he is financially not stable now and would like to wait (they have one child together, but the respondent three children, including the one with the current partner).

Offspring-reproduction/Social status

Some respondents (7) mentioned that their husband/partner wants to produce offspring, or having children shows that the man has social status.

"He says that his parents do not have many children, so he [not clear what she said]." (Femi, 19, Roman Catholic, Secondary high)

"He has only one. He would like to have children because he has only one." (Kesia, 43, Pentecostal, Primary)

"Then you feel great as a father that you have so many children." (Makena, 40, Roman Catholic, Secondary low)

"A man always would want to have children. The family is going to say yes, the man has his children ('Deng famirie au tak ai a man ab eng tjien'). But you as a woman should know that the

man cannot seduce me that I make ten children (a man no moes koor mie dat mie mek tien tjien).” (Desta, 45, Roman Catholic, Secondary low)

Love for children

A few respondents (2) said that her husband/partner wants children because he loves them.

“Because he always says he loves children.” (Amina, 20, Pentecostal, Secondary low) “He loves children a lot.” (Semira, 32, Traditional, Secondary low)

Another respondent mentioned that her partner is not stable financially, and therefore he does not want to have children now.

“Yes, but he says that children must come at the right time. Look now his job, so he says we must wait a little while. Yes, but children are important to him.” (Feechi, 31, Pentecostal, High)

Do not know

A few respondents (2) did not know why their husband/partner find it essential to have children because they have never talked about this or that the husband/partner does not speak much.

Children have value for husbands/partners.

Family’s expectation for children

Most respondents (24) stated their family wants them to have more children. Although some also said that the family does not determine for them to have a child. This form of social and family pressure can affect the number of children a woman has.

"Yes, everyone expects that, especially my mother, my father." (Femi, 19, Roman Catholic, Secondary high)

"And my sisters and my aunt say you only have three. My mother says you are still young." (Dayo, 29, Pentecostal, Secondary low)

"My mom says I must make more children, but I do not think so. I want to go to school. I want to build up my life. I want to be independent." (Binta, 18, Pentecostal, Primary)

"The family finds it an obligation." (Makena, 40, Roman Catholic, Secondary low)

"Because if you see your aunts, they always ask 'how many children do you have'? And you say 'four'; then they say, 'one more, let it become more' (ete wan, mek eng moro)." (Zizi, 38, Roman Catholic, Secondary low)

Some respondents (7) indicated that the family would not decide for them since they (the family) do not take care of the children. One older respondent (50+) said when her family asked her to have more children: "who's going to help take care of the children"? The fact that family cannot determine their reproductive desires can also indicate a change.

These respondents pointed out that their family doesn`t determine for them when they should have children.

"The family does ask, but I have told them that they should not expect much from me." (Nilla, 24, Pentecostal, Secondary high)

"And the family does not help you. They cannot determine for you how many you should get." (Niah, 32, Moravian, Secondary low)

Some respondents (5) indicated they did not know if their family wants them to have (more) children.

"I do not know about that. But if my mother were alive, she would have wanted." (Mudiwa, 50, Traditional, No school)

"Well, I do not know. I do not even know, but I think maybe because they want to see their cousins. Yes, something like that." (Anaya, 24, Pentecostal, Secondary high)

The family's expectations concerning children may or may not influence these women's reproductive goals/desires. However, the family is a positive stimulus and may affect the number of children.

Reason family's expectation for children

Respondents indicated that their families wanted children for reasons such as offspring, reproduction, social security, value and wealth, or social status.

Offspring-reproduction

Most respondents (15) stated that their family wants children from them to expand the family or the lineage.

"That girl makes children for you. The children stay in the family." (Ebele, 43, Pentecostal, High)

"But my mother said: 'I want to see my granddaughter because it is not enough,' and my mother said it is not enough, and I say 'no, no' and my father also." (Sheena, 55, Pentecostal, Primary)

"With Maroons, if you do not have children, you do not build up your village." (Zizi, 38, Roman Catholic, Secondary low)

"They say a lot because my mother does not have many children. Then I must have many children. Then they tell you that you must make children to strengthen the family." (Sanaa, 22, Pentecostal, Secondary high)

Yes, because I have a grandmother and those two over there. They tell me because my mother has only one. Then they tell me always I must have more." (Amina, 20, Pentecostal, Secondary low)

Social security

A few respondents (2) mentioned that the family would like to have children because of the support children can give during sickness or old age.

"With Maroons, it is always so that you must have more children. It is good for them. Maybe when you get old, you have one that can take care of you. Because perhaps you have two, and no one can help you with something. But maybe if you have four or five, one must help you." (Desta, 45, Roman Catholic, Secondary low)

“Girls are more concerned. They are always prepared to be with you when you are sick.” (Ebele, 43, Pentecostal, High)

Wealth-Value

A few respondents (3) declared that children are of value to them.

“But when you make children, Aucaners, I am going to say this, they see children as a valued thing. (I: something valuable?) Yes, a valuable thing. Because my mother was telling me if you go to live with a family and you do not have children, it can be that the people are not satisfied, you must have children because they find that children are your value.” (Tabia, 42, Roman Catholic, Primary)

Social status

One respondent mentioned that people would see how many children you have and will talk about it.

“During the burial, it becomes the hustle and bustle. ‘Yes, do you see? They are only her children. They are only his children.” (Makena, 40, Roman Catholic, Secondary low)

Children have value for the family. Thus, the attitude of women, husbands, families, and religious institutions regarding children is positive. Women are in a social environment that positively impacts their fertility preferences and values.

Women’s reason for wanting (more) children

Respondents reported various reasons for having or wanting to have (more) children. Some had children because they did not plan the pregnancy or because of contraceptive failure. Others stated that they could (or will be able to) take care of those children. Others said that they wanted to have offspring or were trying for another child. A few mentioned that they might have more children because God’s plan is different than theirs. A few said that they love children (2) or that the children can take care of them later (2).

Be able to take care

Respondents said that nowadays, women should be able to take care of their children.

Some young and old respondents (5) believe that one should be able to take care of their children if one wants to have children.

"I want to have children, but I do have a limit. I say if you cannot take care of a child, do not have children. A child does not ask to come. If you know that you are already struggling, do not start with it. Because taking care of a child is not easy, especially during the period when they are babies. If the child already eats rice, it is not easy, but a little bit easier. From birth up to a certain age, two, two and a half, three, it is not easy." (Nila, 24, Pentecostal, Secondary high)

"Because I am ready to take care of a child." (Deka, 16, Roman Catholic, Secondary low)

"Because I can take care of four." (Nala, 30, Pentecostal, Secondary high)

"I find it good. I can take care of those three." (Fayola, 41, Pentecostal, Secondary low)

Did not plan

One respondent said that she did not plan to have the number of children she has but that she also was not able to get pregnant immediately.

"So, the time when I got the first one, I had no idea yet how much I wanted and how much I did not want. But I said that I wanted children. I did not plan how many children I wanted. No, I did not plan that. But later I saw that you should not make a lot of children. And I could not have children also [I was not getting pregnant easily]. Some women when they give birth, sorry, and she has intercourse with her husband, she gets pregnant immediately. No, I did not get pregnant right away. Almost three, four years later, I got pregnant." (Tabia, 42, Roman Catholic, Primary)

Contraceptive failure

A few respondents (2) stated that contraceptive failure could be the reason for having more children.

"I wanted five kids. Those three are a surprise. I did not know I was pregnant. Before the last child, I was on the injectable. I used it for four years. I did not feel well. I went to AZ (Academic Hospital), and there they found out that I was three months pregnant. The same happened with the last one." (Makena, 40, Roman Catholic, Secondary low)

God

A few respondents (3) indicated that God's plan differs from theirs and so they may have more children.

"I want more. I want two girls and two boys. I accept. You can have a desire, but God's plan is always different than ours." (Nila, 24, Pentecostal, Secondary high)

"I think I'll stop with three. For now, let us say. Because sometimes you say that, but you do not know what the Lord wants. So, with me, I am not yet sure. But I do not think I still want, but I am not quite sure." (Dayo, 29, Pentecostal, Secondary low)

Offspring

Both young- and old respondents (4) want to have children to have offspring and because their families did not have enough children.

"So, that later I can have enough offspring." (Anaya, 24, Pentecostal, Secondary high)

"When you do not have a child, and you die, your root dies. But when you have a child, it is a generation after another generation. But if you do not have a child and you die, then you would get cut off right there." [she means that somebody who does not have a child, will have no progeny] (Morowa, 18, Roman Catholic, Secondary high)

"Because my mother did not make children and for me, preferably four children." (Amina, 20, Pentecostal, Secondary low)

"I wanted more because of my family. We do not have many children. My grandmother got five girls. My grandmother did not get boys. And those five girls, most had four, three, two boys, a girl or three boys, two boys, a girl or two boys, not more." (Kesia, 43, Pentecostal, Primary)

Trying for another child

Some respondents (4) said that they are/were trying for another child in case they do not have enough boys or girls.

"But the reason why God has said that you are not going to have four. Then I had one daughter. I was looking for that son. Then I had a daughter. I was looking for a son, and then I had a daughter again. And I looked for a son, and the third one was a son. And I say I want another son, and then I will stop. And then I had a daughter again, and the last one, the seventh, is a son. Then I said I stop." (Sheena, 55, Pentecostal, Primary)

“I have three boys and one girl. I wanted to have more, but I now have no man. I wanted boys and girls. I want another girl. I wanted two boys and two girls. But since I have three boys, I want a girl. I say I am going to try for another girl.” (Zizi, 38, Roman Catholic, Secondary low)

“*If my second child is a girl again, I am going to try again for a boy. But if that second child is a boy, that’s it.” (Hasani, 24, Moravian, Secondary high)*

Women’s reason for not wanting (more) children

Most respondents said they do not want children anymore because of financial reasons. A few said that they could not take care of the children because things are getting expensive in the country. A few would have liked to have more children, but medically they cannot have anymore. Some respondents were not sexually active. One respondent mentioned that she was in a LAT (i.e., living apart together) relationship, and you need the man to get pregnant.

Economic

Both young- and old respondents (6) mentioned that economic reasons such as financially not being able to take care of the child or the economic situation in the country make it challenging to have more children. Financial/economic reasons are a form of pressure that prevents people from having a big family.

“Yes, because I have a grandmother and those two. They tell me because my mother only has one, I must have more, but the country is getting worse and worse to buy porridge and so, I cannot. (I: Is it more expensive?). Yes, it is difficult. So, if I had money, I would have more kids. Yes, there are those who tell me every day. My son is now one year old, and they say next year I must have another one. And when that one comes, I must have one again. I am telling them ‘no.’ I do not answer because when I answer, they get upset, your mother has you only, yet you do not want to have kids. I say, ‘you do not know what the consequence is.’ (Amina, 20, Pentecostal, Secondary low)

“I stop here. Reason why? It is not easy in this country. Even if you would want to have more, you cannot make children, and then you cannot take care of those children. (I: ok. “With not easy in the country,” what do you mean exactly?) So, how can I say it? Almost everything is expensive. (I: ok, then I understood that.) You cannot buy milk, pamper, and those things. Because you are not going to make that child and sit down, and you have nothing.” (Niah, 32, Moravian, Secondary

low) "But with Maroons, they say with us Maroons that is your wealth ("nah joe goedoe"). When you have many children, it is your wealth. But now it is no longer so. Nobody is going to help you to take care of them. And you cannot make a child, and you cannot take care of that child. You should be able to look after that child, that child must go to school ("iem mang loek a tjien, a tjien moe gaa skoro")." (Desta, 45, Roman Catholic, Secondary low)

Health

Medical reasons were also given by a few respondents (2), as to why they are not able to have more children.

"No, I wanted a lot (I: and why hasn't it become much more?) because, from a medical perspective, I cannot." (Imena, 39, Roman Catholic, High)

No, I have high blood pressure." (Zola, 44, Moravian, Primary)

Not sexually active

Some of the respondents are currently not sexually active and therefore are not able to have a child. These respondents are mostly still in school.

Other

One respondent mentioned that she had a LAT *(Living Apart Together)* relationship, so she could not have another child because "you need a man to get pregnant."

But the situation has not allowed it. I had a LAT (Living Apart Together) relationship; my partner lived abroad. You need the man to get pregnant. (Ebele, 43, Pentecostal, High)

The statements indicate that these women, young and old, want to have children. Children are not a burden, but these women want to be able to take care of them. Economic or financial and health conditions can prevent women from having the desired number of children.

A summary of the main findings of the attitudes and social institutions concerning childbearing decision and procreation follows below.

Summary of fertility behavior

Findings showing that children have value; there are no sex preferences for children; social institutions that expect respondents to have children may have a positive influence to motivate the respondents' childbearing decisions.

Outside pressures, such as the economic situation in the country and health status, may negatively impact the fertility behavior of the respondents.

There are institutions within the matrilineal system of the Maroons that encourage both men and women to have children: families, husbands, culture, and the church. Most respondents' families expect them to have children. These families want children for reasons such as offspring, reproduction, social security, value and wealth, or social status. Most husbands/partners also want children. One respondent mentioned that in Maroon culture, when a woman has a man, she must make children for that man. Otherwise, he may leave her. Most husbands/partners want children for offspring or social status, according to the respondents. A few said that their partners love children. A few did not know how the husband thinks about having children.

Most Christian respondents believe that they should multiply since God has said to do so. One respondent also mentioned that children are a blessing. A few did not know what the church thinks about having children.

Children are a wealth for women. Women have value when they have children or can reproduce. Children are essential for respondents for several reasons. Some respondents want children because they give them a good feeling, and are a company for mothers, especially when they are alone. According to the respondents, the need for children as offspring is necessary for the continuity/survival of the lineage.

Furthermore, another value for children is that they give the mother a positive feeling; children make the mother happy. Another reason for the need of girls is for the transfer of the culture. Mothers experience both male and female children as support/social security, especially in days of sickness or old age. And as noted by a respondent, children are a blessing. God determines when and how many children a woman will have.

There are no sex preferences for children among the interviewed. Each child has a separate place in Maroon society that makes them essential. Every child is welcome. Girls are necessary for the matrilineage to produce offspring for the continuity of the lineage.

On the other hand, boys are also necessary. Boys/men mainly have an authoritative role in family affairs, religious rituals, and as leaders of the tribes. The leadership of a tribe (called the “Gaaman”) or village (named the “kabiten”) is in the hands of a man. Only men can do certain traditional rituals. Men decide, for example, what the date of the funeral is of a dead family member.

On the other hand, some pressures prevent them from having more children.

Most respondents who said that they do not want children anymore talked about financial reasons/economic situation in the country. These circumstances make it challenging to have more children. Many respondents reported that they want to be able to take care of their children. A few said that they could not take care of the children because things are getting expensive in the country. One respondent indicated that the husband wants children, but he is financially not stable now and would like to wait to have other children. A few would have wanted to have more children, but because of medical conditions, they cannot have anymore. These are outside pressures.

Reasons reported by respondents for having or wanting to have (more) children and those who do not want children anymore may help to explain the decisions made regarding fertility preferences.

Respondents talked about some of the reasons why they want to have (more) children. Many want children as offspring. Some said that children could take care of them in old age or can support them when they are sick. A few respondents are trying to have another

child because they do not have enough. They would like to have more. Some want to have more boys or girls because they already have an adequate number of boys/girls. Another reason given by respondents is that God determines; therefore, they may have more children than they would plan. A few said that they love children. One participant also indicated that they have children because of contraceptive failure.

On the contrary, some respondents mentioned that the economic situation in the country prevents them from wanting to have more children because baby food and so on are expensive now. Therefore, they cannot take care of those children if they had them. A few, although they would like to have more children, not being possible to have them because of their medical condition such as blood pressure.

Not being sexually active, as some respondents have reported, is also a reason for explaining why respondents delay/postpone/prevent having (more) children.

Union formation is part of reproductive behavior.

4.3.3 Union formation behavior

This section describes the findings regarding the union formation behavior of the respondents. Both union formation and union dissolution impinge on fertility outcomes. Marriage forms that the Maroons practice are traditional marriage and polygyny. Polygyny is a factor for high fertility. Multiple marriages/unions enlarge the number of children of a Maroon man.

The occurrence of divorce among women

Union dissolution affects fertility. Maroon women can divorce their husbands.

Many respondents said that a Maroon woman could divorce her husband. A few stated that divorce is not permitted. Others said that the woman should have a legitimate reason to divorce her husband.

No

A few respondents (3) stated that a Maroon woman could not divorce her husband.

"In the past, from my experience? In my grandmother's time, it was not allowed. Because my grandmother had lived for 40 years only with one man until she died." (Nala, 30, Pentecostal, Secondary high)

Not easy

Some respondents (5) indicated that it is not easy for a Maroon woman to divorce her husband. She needs to have a legitimate reason. The family gives permission, or there should be a good reason to divorce.

"With a Maroon woman, it is not so easy. When you leave that man, especially culturally, it is not easy because then the family comes in between and so on. But sometimes, there must be an exact reason." (Lesedi, 44, Pentecostal, Secondary low)

"She can't just leave." (Mudiwa, 50, Traditional, No school)

Yes

On the contrary, most respondents (25) reported that a Maroon woman could divorce her husband.

"Yes, they can divorce." (Femi, 19, Roman Catholic, Secondary high)

"As soon as the woman wants to, I think." (Wina, 29, Roman Catholic, Primary)

"You can divorce, yes." (Imena 39, Roman Catholic, High)

The above shows most respondents said that Maroon women can divorce their husbands but that they need a legitimate reason.

Acceptable reasons divorce women

The following shows the legitimate reasons for divorce.

Respondents reported many grounds for divorce. The reasons are as follows: the man has another woman; there does not need to be a reason; domestic violence; if one does not want to be any more in the relationship; unfaithful; the husband does not take care of them/his family anymore. Most respondents said if life does not go well, that is if there are problems, quarrels, disagreement. Some respondents could not give a reason even though they indicated that the woman might divorce her husband.

Another wife

One reason given by a few respondents (3) is when the man has another woman, she may leave her husband. These are respondents in the young age group 15 to 29.

"For example, a reason can be that she does not accept a second woman from her husband. Because usually, when they have a second woman, then they come with the uncles and aunts to talk to the wife. 'Look that man has a second woman, do you agree or disagree'? Then she can say that she does not agree, and then she leaves. But if she says that she goes, it is like she does not honor her husband or something like that. But if she says yes I accept it, and the husband has

a second wife, and she decides I find it no longer pleasant then she is seen already as a woman who does not keep her word; you first say that you want it and now you are saying that you do not want it. Perhaps one will then speculate on what the reason is. And often, women are being told that they want to commit adultery, or they say in Aucaan "de wani doogi." This means she wants to commit adultery, or you want to go to another man. But there are always family members who are going to blame you, but that is everywhere." (Zuri, 29, Pentecostal, High)

"Maybe that man has taken another woman." (Amina, 20, Pentecostal, Secondary low)

Any reason

A few respondents (2) mentioned that in the city, you are not obligated, you can decide when you want to leave the relationship, or you can go without having a reason.

"In the city, you decide. They cannot oblige you." (Ebele, 43, Pentecostal, High)

"A*nd you do not need to have a reason." (Feechi, 31, Pentecostal, High)*

Does not want to continue

Some respondents (6) said if the woman does not want to be in that relationship anymore, she may leave the man. Four of these respondents are in the young age groups.

"If she feels like I do not belong to you anymore. I do not want to be in a relationship with you anymore, then she can go." (Morowa, 18, Roman Catholic, Secondary high)

"As soon as she sees that life is no longer as it was. If she does not want anymore, she does not see life anymore as it was. Then this is it." (Wina, 29, Roman Catholic, Primary)

Domestic violence

Some respondents (6) mentioned domestic violence, such as beatings or abuse, as a reason to divorce the man. Five of these respondents are in the old age category 30 and above.

"If the man beats her, she said 'I do not want because the man abuses me.' He beats his wife; she does not have peace." (Tabia, 42, Roman Catholic, Primary)

"The main reason I have experienced is abuse. If the man abuses the woman, and they also tell you when you get married, culturally anyway, if you no longer want that woman, do not abuse her

and those kinds of situations. Take her back to her family. Yet as a woman, you can indicate I cannot take this anymore. The man abuses me. Then your family is supporting you too. But then you still have attempts where people, at least there are still attempts made to mediate, and if they see it does not work, then they also cooperate that you separate." (Imena, 39, Roman Catholic, High)

"Maybe the man beats you, or perhaps he threatens you." (Lesedi, 44, Pentecostal, Secondary low)

Do not know

Some respondents (5) could not give a reason when asked when it is allowed to divorce, although they said that the woman could divorce her husband.

"When is that possible? When is that allowed? Whether it is still allowed? So, I do not have an answer because I have no experience in this area. So, I cannot answer it." (Anaya, 24, Pentecostal, Secondary high)

The husband does not take care of the woman

When the man does not take care of the woman, she may leave him was the reason for some respondents (5). The man should take care of the woman. In the interior, it is the man that should build her a house, and he clears the horticultural plot. Furthermore, he provides the material things that are needed and so on.

"Maybe the man has taken another woman, and he no longer takes care of her as it used to happen. Then you will get a divorce." (Amina, 20, Pentecostal, Secondary low)

"If that man sees another woman, maybe, then he starts beating his wife. Then he does not give money to this woman anymore. Then he does not take care of his wife. When the woman says A, he says B. That's how it starts." (Binta, 18, Pentecostal, Primary)

"If he is unable to take care of her." (Makena, 40, Roman Catholic, Secondary low)

Life does not go well

Most respondents (11) gave as an acceptable reason which allows a Maroon woman to divorce when life does not go well under circumstances like when there are problems that cannot be solved, quarreling or disagreement.

“If life does not go or you separate. If you and your husband do not agree, you divorce.” (Kesia, 43, Pentecostal, Primary)

“If there are many problems that cannot be solved, you must divorce, right?” (Hasani, 24, Moravian, Secondary high)

“*If she can no longer handle how her husband lives, she can get a divorce. (Zizi, 38, Roman Catholic, Secondary low)*

“She can leave her husband when he does not deal well with her or with certain things.” (Subira, 18, Traditional, Secondary low)

“For example, if the man does not give her the right treatment. That is the main reason. Because you are not going to stay with a man that does not do anything for you, or you are alone there.” (Arjana, 38, Pentecostal, Secondary high)

Unfaithful

Some respondents (4) indicated that adultery makes it possible for the woman to divorce her husband.

“If she is legally married, according to the Bible, there are only two things: if your wife or husband gets caught in sexual sin or death [she means that adultery and death can separate a woman from her husband]. If the woman caught the man, then they might come to offer excuses, to give him a chance. The woman can choose I do not want anymore.” (Nilla, 24, Pentecostal, Secondary high)

“If he is unfaithful because there are some like that.” (Mudiwa, 50, Traditional, No school)

“W*hen the man commits adultery, he has women here and there. Sometimes the wife does not want anymore because he has another woman that he sees. Then it comes down to the wife. So, the wife is saying, ‘no, I cannot take this life anymore.’” (Tabia, 42, Roman Catholic, Primary)*

Women can divorce based on ground reasons for divorce: domestic violence, infidelity, other wives, problems in the relationship, neglect.

Conditions for divorce women

Next, the terms for divorce explain under which requirements a divorce may occur. When there are rules and conditions, one cannot separate easily, which can decrease the termination of marriages/unions.

Respondents indicated that often family should be notified when a woman or man wants to divorce because, in the initial stage of the relationship, the family is involved. Specifically, when it is about traditional marriage, there are some rituals that the family should do. The family recommends when to divorce and gives a separation period in case individuals reconcile. But some respondents do not agree with family involvement.

Family involvement

Most respondents (15) indicated that the family should get involved when a couple divorces.

"A complaint is made to the man's family and to the woman's family too. Not a single time but several times. Then consent is given." (Zizi, 38, Roman Catholic, Secondary low)

"I think that if it happens like what you said about the "trowe sopie," and so on, I think you should go to the family first." (Hasani, 24, Moravian, Secondary high)

"When the families meet, you can separate." (Makena, 40, Roman Catholic, Secondary low)

"If she feels like I do not belong to you anymore. I do not want to be in a relationship with you anymore. Then she can go. But she got to tell the mother and the father of the partner." (Morowa, 18, Roman Catholic, Secondary high)

Reason family involvement

Some respondents mentioned reasons as to why the family must be involved when people divorce. The family permits the separation or tries to reunite the couple.

"So, you go to the husband's people. Of course, you are going to try first to make a change. And if it fails, then they say "djie aaba" (I: djie?) so you "djie a man aaba." You go to the people, and you say to those people I do not want anymore because of such and such reasons and then if the man also does not wish to anymore, he takes his belongings then he leaves. Or if he still wants to stay in a relationship, then he comes with his people, then he begins to talk. So, his people and the family in law they come together to talk about this. So, they are going to try to mend it back. If the two parties do not want anymore, because when a woman says no, it is no, right, then (I: separate?) separate." (Arjana, 38, Pentecostal, Secondary high)

"You must go to the family of the husband. You are going to tell your things, how that man lives and so on. Then those people will permit you to leave the man." (Fayola, 41, Pentecostal, Secondary low)

Separation period

A few respondents (2) mentioned that Maroons have a separation period before they officially divorce. The woman cannot take another man during the separation time.

"After three months, only she may get another man. (I: But why than those three months?) Because you do not know exactly if that man has left you. That is why they wait after three months or after four. (I: I did not know that. Nobody told me that.) Oh, yes, it is so. Then after three months, you can get another man. Then he can never come back there because you waited for up to three months. Then he cannot come there anymore. Then he is gone already. Then you can get another man." (Binta, 18, Pentecostal, Primary)

"Yes, because look if you marry traditionally. Then you must also do it like that to inform them: 'look, I do not see life anymore between my partner and me.' I do not want it anymore. And then they're going to ask questions: 'Are you sure you do not want to have it anymore? Yes, but we give you three months period. Then you are officially divorced. If the man dies or the woman dies within those three months, you still must mourn. After those three months of separation, then you are officially divorced." (Wina, 29, Roman Catholic, Primary)

One respondent also said that the church tries to counsel the couple that decides to divorce.

"And legally, it is approximately the same. The church counsels you 'Do you want to do it'? And if the wife or the husband think they want to do it anyway. Then they just leave you, and you look at what you do further. But those Christian leaders do everything they can so that you do not divorce." (Falala, 26, Pentecostal, Secondary high)

The above shows that there are institutions in place that try to prevent a divorce. The family is involved and will try to reconcile couples and permits to divorce if it is necessary. The partners must adhere to a separation period. Also, the church is involved in counseling couples.

Practice of polygyny

Most women interviewed reported not living in a polygynous union, though they reckon the practice. One woman is the second wife of her husband, and another respondent's husband has multiple relationships. The practice of polygyny indicates if polygyny still takes place. Hence, this social institution influences the demand for children.

Many respondents agreed that in the Maroon culture, men could have multiple wives. However, one respondent said that a Maroon man could not have more wives if he is already married.

Many respondents (31) indicated that according to the Maroon culture, the Maroon man could have more than one wife.

"Yes, they find it normal. But if it was a woman (laughs), no, then they do not find it good. But a man can have more than one." (Femi, 19, Roman Catholic, Secondary high)

"Yes, with the Saamakas and the Ndyukas/Okanisis, it is possible." (Nala, 30, Pentecostal, Secondary high)

"According to tradition, it is allowed, but I really would not accept it." (Anaya, 24, Pentecostal, Secondary high)

"But within the Maroon culture, you still see that it occurs." (Zuri, 29, Pentecostal, High)

"Yes, in our culture, it is allowed." (Zizi, 38, Roman Catholic, Secondary low)

One young respondent stated that if the Maroon man is married, he cannot have more wives.

"Maroon man? No, because he is married, right?" (Deka, 16, Roman Catholic, Secondary low)

Condition of practice polygyny

Conditions of polygyny explain when this marriage institution is accepted or practiced.

In a polygynous marriage, the parties involved must accept each other. The husband must be able to take care, financially of the needs of all wives, and give each wife the same things. One respondent stated that not all Maroon tribes practice polygyny.

Acceptance

A few respondents (3) mentioned that the first wife must be willing to accept another wife.

"And those women cannot live in hostility. The first should go to the second." (Dayo, 29, Pentecostal, Secondary low)

"Well, we know what we learned from our parents that they could have even more than three women. He can have more as soon as he can understand the women. The women can understand each other even if they are not in one place, but they are with one man." (Neema, 45, Traditional, Primary)

Economic

The man who wants more wives must be able to take care of them. The man must treat the women equally. For example, if he buys a refrigerator for one wife, he must buy the same brand refrigerator for the other wife. Some respondents (8) said that a man must be capable of taking care of multiple wives and give them the same treatment.

"Men can have more wives, but there is a rule. He must do the same, give the same treatment to these women." (Maaza, 33, Pentecostal, High)

"When they have money. Because when you buy one thing for one woman, you should also be able to buy for the other." (Binta, 18, Pentecostal, Primary)

"If you can take care of them, you can have more than one wife." (Nilla, 24, Pentecostal, Secondary high)

"They do it. So, it is okay for them. That is if you are not converted. They do it because most have two women or more. And with them, it is about as soon as they can take care of the woman, buy rice for the woman, a house, for example, so they can support the woman in everything she needs. But if you are converted, then you cannot do it anymore." (Falala, 26, Pentecostal, Secondary high)

Environment

One respondent said that polygyny is practiced in some Maroon tribes while not practiced in other tribes. In some clans, it is seen as shame when a man has a second wife.

"Some tribes. (I: oh, some tribes among the Maroons?) but some not. Because let me give you an example, we are from Klaaskreek, and in Klaaskreek, it is not known. You are going to have a second one, but then it is not going to be known. (I: why shouldn't it be known?) They see it as a shame that you have a second wife, that you have two wives. But some tribes, especially deep in the interior, it is normal. You can have 3 to 5 wives." (Niah, 32, Moravian, Secondary low)

The practice of polygyny occurs under conditions that the man treats the wives equally and takes care of them financially. Some tribes or lineages do not practice polygyny. There are differences among tribes/lineages. It is also possible that these differences in practice occurred at a later period. Because of Christianity, the practice has ceased in the Matawai society (De Beet and Sterman, 1981). In Christian Saamaka villages, the practice has stopped or is minimal (Adams, 2003).

Knowledge of polygynous unions

These examples make clear that polygyny is practiced in the immediate environment of respondents, even if they do not accept it.

Many respondents know, for example, an uncle, a father, and so on who are in a polygynous relationship. The family is also involved because the family asks the first wife for permission if the husband can have a second wife. And the man also marries all the women, which is also called "aksi samaa." The 'aksi samaa' means you ask for the (hand of that) person.

Many respondents (11) knew somebody in their immediate environment who is in a polygynous marriage/relationship. Knowing someone shows that respondents experience polygyny in their immediate environment.

"My father had five wives. They just live like that. They live with women." (Nala, 30, Pentecostal, Secondary high)

“I still have an uncle who has multiple wives, and those women know each other. But they are close to 70, 80.” (Zuri, 29, Pentecostal, High)

“Because I know a man who has two wives in the same plot. So those two women were living in the same plot, and they were sitting just like two sisters when they were embroidering.” (Niah, 32, Moravian, Secondary low)

“I know an aunt of mine. When I got to know her, her husband had, I think, five women.” (Tabia, 42, Roman Catholic, Primary)

Dynamics in polygyny

‘Dynamics in polygyny’ refers to the changes that take place concerning polygyny. Respondents do not want to be in a polygynous marriage. These changes may influence fertility because it can decrease the number of children in the population, for example.

There are alterations when listening to these respondents, in accepting polygamy. Many respondents stated that they would not agree to be in a polygynous relationship. Some of the reasons why this was not accepted were diseases; one cannot love many persons at once; if the man wants another wife, that means that he earns a lot, so therefore he can give her the extra money that he would have spent on the other wife.

Some respondents also said that the younger generation or, the more educated do not accept polygynous relationships.

Non-acceptance

Some respondents (12) mentioned that they do not allow their husbands/partners to have other women.

“I would not accept that. (I: But it is allowed?) According to tradition, it is allowed, but I really would not accept it.” (Anaya, 24, Pentecostal, Secondary high)

“There are girls that are accepting it, but I am not going to accept that.” (Morowa, 18, Roman Catholic, Secondary high)

“I do not like it. I do not accept that.” (Fayola, 41, Pentecostal, Secondary low)

Reason non-acceptance

Some respondents (7) also explained why they would not accept that the man has other wives.

“I, as a woman, would not be able to accept that I have a man with three other wives. How can you tell me that you, as a person, can love ten people? I generally understand that you must love your neighbor, but as for relationships, you cannot tell me that you love me and that you give me affection. So, the same sentiments with the other woman I do not accept, and I do not believe.” (Nilla, 24, Pentecostal, Secondary high)

“I cannot be compared to other girls or compete with other girls because of a man.” (Morowa, 18, Roman Catholic, Secondary high)

“But I would not allow my partner to have anyone. That means that you earn a lot of money to say so. So, if you used to give me 1000 SRD, then you should give me 2000 SRD because you make a lot, right. You want to have more women. Then you should give me 2, 3 times per month.” (Arjana, 38, Pentecostal, Secondary high)

“Well, nowadays, I would not accept it because the world is not like before. There are so many diseases. That’s why I said I could not accept it.” (Neema, 45, Traditional, Primary)

Present versus past

Some respondents (5) indicated that the younger generation does not accept this anymore.

“The ones that are educated now do not do it anymore as before. You really must be able to take care of both women because life is expensive. That is why most guys do not do it anymore. The older ones saw it as fun, and the family liked it.” (Makena, 40, Roman Catholic, Secondary low)

“But women of today, a man of another woman, you look for trouble. But they are doing it. They keep doing it.” (Desta, 45, Roman Catholic, Secondary low)

The institution of polygyny is changing. Both young and old, do not consent to be in a polygynous relationship.

Husband has more wives

The husband has more wives indicates if the husband/partner is in a polygynous relationship.

Many respondents said that their husband/partner did not have other wives. Some were not sure if their husbands/partners had other women. A few respondents reported that their husbands/partners had another wife.

Do not know/not sure

Some respondents (5) did not know or were not sure if their husbands/partners had more wives.

"I do not know that. Maybe he has other women, but I do not know exactly." (Binta, 18, Pentecostal, Primary)

"I do not know if he has more women." (Lesedi, 44, Pentecostal, Secondary low)

No

Most respondents (16) stated that their husbands/partners did not have another wife.

"I alone. From then until now." (Sheena, 55, Pentecostal, Primary)

"My partner does not have another woman." (Nilla, 24, Pentecostal, Secondary high)

Yes

A few respondents (3) mentioned that their husbands have another wife. One older respondent said that her husband had a lot of women.

"My husband has another wife, that is his first wife. I am the second wife." (Makena, 40, Roman Catholic, Secondary low)

"He had a lot of women ('a bing lai oema')." (Mudiwa, 50, Traditional, No school)

It seems that most men do not choose to be in a polygynous relationship. Perhaps because the woman does not accept it or that it is the man's choice. Influences such as Christianity and value changes of modernization may have an impact on the practice of polygyny (Nag et al., 1980).

Partner choice

Finally, 'partner choice' discloses if the respondents can choose their partner or that others are involved or decide for them who they can marry or cohabitate. If respondents have freedom of choice, this can inspire them to be in a union.

Many respondents said that they chose their partner. On the one hand, some reported that both they and their partner decided to have a relationship. Others mentioned that the partner wanted them. A few said that family members were involved or that they had a dream.

Both

Some respondents (6) said that both they and their partners decided to be together.

"Yes, he chose me, but actually, I also chose because someone is courting you for a relationship, and you also have to choose if you want or do not want to be in a relationship with the person. So, we chose each other." (Zuri, 29, Pentecostal, High)

"If I am getting married, then we, my partner and I, we will make that decision ourselves. People are not going to determine for me that I should get married or not. Is what I feel for the man or what the man feels for me, and not a third person. With me, I am a little difficult in that matter. As with other population groups, they are married off [interviewer's comment arranged marriage]. No, not for me." (Arjana, 38, Pentecostal, Secondary high)

Other

A few respondents (3) mentioned that God or some family members were involved in bringing them together.

"… from God, because I first saw him in my dream." (Amina, 20, Pentecostal, Secondary low)

"My first partner I had in the interior. His sister and aunt loved me. And they said we want you with our brother and so on. And then they came to me. And then we were talking to each other." (Zizi, 38, Roman Catholic, Secondary low)

Partner

Some respondents (5) indicated that it was the partner who chose to be in the relationship.

"M*y husband has decided to start the relationship." (Kesia, 43, Pentecostal, Primary)*

"He chose me." (Subira, 18, Traditional, Secondary low)

Self

Most respondents (9) noted that they chose their partner.

"I chose my partner. When I was 16 years, I married my husband." (Nala, 30, Pentecostal, Secondary high)

"I chose." (Dayo, 29, Pentecostal, Secondary low)

"I chose him." (Arjana, 38, Pentecostal, Secondary high)

"I chose him. He approached me." (Sanaa, 22, Pentecostal, Secondary high)

These women can decide when making partner choice. The role of the family in the partner choice process is minimal. But family's approval is still necessary because of the family's involvement in the marriage ceremony and divorce.

A summary of the main findings concerning the union formation behavior of the respondents follows.

Summary of union formation behavior

Union dissolution is allowed under specific conditions and reasons. Polygyny is still practiced and is also subject to terms. However, changes are taking place. The interviewed refuse their husbands to have multiple wives. Most respondents also select their partners, showing their independence in this aspect of life.

Most respondents indicate that a woman may divorce her husband, although a few stated that she must have legitimate reasons to do that. For a few, it is not possible to divorce. Some reasons permit a woman to divorce: when the man has another woman, or he beats his wife or is unfaithful; when one does not want to be any more in the relationship or if the husband does not take care of them anymore. Another reason that most respondents gave is when life does not go well; when there are problems, quarrels, disagreement in the relationship. Some respondents could not provide a reason even though they indicated that the woman might divorce her husband. A few respondents mentioned that one could separate from the man also without a reason.

However, certain conditions for divorce were manifested. The man or woman who wants to get a divorce/separate notifies the family. The reason for this is that with traditional marriages, the families of both parties are involved because they must do some rituals. The family may advise when to divorce. But some respondents do not agree with family involvement. Also, the individuals involved, observe a separation period. This separation period gives them a chance if they want to reconcile.

Another cultural institution within the social organization of the Maroon society is polygyny. Men can have multiple wives. And like divorce, polygyny also is subject to certain conditions. In a polygynous marriage, the parties involved must accept each other, especially the wives. The husband must be able to take care, financially of the needs of all wives, and give each wife the same things. However, one respondent stated that not all Maroon tribes practice polygyny.

When asked if their husbands had more wives, answers were diverse: do not have other wives, not sure if they had other women, or had another wife.

Many respondents chose their partners. Others reported that both parties agreed to be in the relationship. Others mentioned that the partner wanted them. A few said that family members were involved. One respondent said to have chosen her partner based on a dream she had.

It looks like that there are changes in accepting these marriage forms and practices. Many respondents do not take a polygynous relationship. Some of the reasons reported by the respondents were sexually transmitted diseases, and one could not love many persons at once. If the man wants another wife, that means that he earns a lot, so therefore he can give the current wife the extra money that he would have spent on the other wife. Some respondents also said that the younger generation or, the more educated do not accept polygynous relationships. This non-acceptance of this practice is related to generational and socio-economic factors.

The quantitative results displayed in section 4.2.3 that contraceptive prevalence is low relative to other ethnicities. The use of contraceptives is a critical factor that determines fertility. Contraceptive use limits the family size.

4.3.4 Contraception behavior

This section focuses on identifying factors affecting contraceptive use. Attitude towards contraceptives and experiences may increase or limit the use of a method. Information about and access to contraceptives are other factors that influence contraceptive prevalence.

Women's experience of contraceptive use

Women's experience may prevent or stimulate the use of contraception. The prevention will lower the practice while the stimulants will increase the usage of contraception, which in turn will influence fertility negatively or positively.

Some women reported having good experience with contraceptives while others experienced side effects. Women said that the contraceptives are effective; they did not get pregnant. Some side effects like gaining weight, feeling sick, and having menstruation problems were reported. One respondent mentioned the failure of contraceptives; she got pregnant while having the contraceptive injection and the IUD that was not placed well. This contraceptive failure was diagnosed after discovering that she was pregnant.

Effective – good

Most respondents (11) had a good experience and reported that the contraceptive was effective.

"I have a good experience, but I must go check it out every three months." [Respondent has the IUD]. (Nilla, 24, Pentecostal, Secondary high)

"It worked for me. I received guidance. I did not just go to buy it myself and then took it. I was supervised. I regularly went to Stichting Lobi[45]. My blood pressure was checked, and I was weighed." (Imena, 39, Roman Catholic, High)

"My is experience is good. It is not good for me, but you must use it. Because if you do not use it, you can get pregnant. Because when I get my menstruation, I get it almost a whole month." (Desta, 45, Roman Catholic, Secondary low)

"It worked, but I just stopped." [Respondent was pregnant with her first child during the interview] (Subira, 18, Traditional, Secondary low)

Side effects

Some women (10) stated that they had experienced some side effects. There were several side effects, such as gaining weight, menstruation problems, feeling sick. The

[45] Stichting Lobi or Love Foundation *is the health center that provides family planning and sexual education in Suriname*

women who experienced side effects either used another contraceptive or stopped using a contraceptive. Others keep using the contraceptive despite having experienced side effects because they do not want to get pregnant.

"In the beginning, it was okay. But after a couple of years, I have used it consistently, and then I started to have my period irregular. So, on the advice of my doctor, I stopped using it until today." (Arjana, 38, Pentecostal, Secondary high)

"I am gaining weight of it, but I need it. If I stay like this, I'll get pregnant." (Desta, 45, Roman Catholic, Secondary low)

"My experience? After my first birth, I have used it for eight years, and after the second one, I have used it up to now four years. My experience with the use of the pill is, I am obligated to take a [vaginal] steam bath. Because if I do not, after my menstruation comes something from my body, how do you call that, water, moisture. So, I experienced that. So, after my menstruation, I am obligated to do that. Otherwise, too much moisture comes, I will wet my skirt." (Nala, 30, Pentecostal, Secondary high)

"I have no bad experience with the pill, but with the injectable. Because they had informed me that you have your period every three months, but it never came. Then I went to the clinic, and I stopped it, and after I stopped it after approximately nine months, then it still had not come. Then I went to the doctor, and then they gave me a tablet, only then did it begin to come again." (Feechi, 31, Pentecostal, High)

"It makes me fat. I almost do not want to use it, but because you get pregnant, that is why you must use it." (Semira, 32, Traditional, Secondary low)

Many women have a good experience with contraceptive use. Thus, they continue to use a contraceptive method. Women who have experienced side-effects continue the application or change the method or stopped using it. Contraception is used mainly to avoid pregnancy. Contraceptive use positively affects fertility in limiting the number of births.

Women's reasons Contraceptive use

The reasons that respondents mentioned demonstrates if the contraceptives are used to control fertility or for other purposes. Hence, birth control results in lower fertility.

Most respondents are using/have used a contraceptive as birth control. Few respondents used contraceptives to regulate their menstruation or to protect against sexually transmitted diseases.

Some respondents used the pill to delay their menstruation. A few women wanted to attend events. Others wanted to be with their husbands because he was away from home for some time. Maroon women do not sleep with their husbands when they have their menstruation. In the interior, they must sleep in a separate hut, away from the living area of the villagers. During the interviews, some women noted that they sleep in another room (with the kids). There are no exclusive houses/huts for women to sleep in when they live in the city. Women who have their menstruation are not allowed to cook for a man/husband. Some even said that they are not allowed to touch or go in the refrigerator during this period. They must sit in a separate chair when they have their menstruation. They must also drink water from a different bottle, and someone like the mother can fill it again if it is empty.

On the other hand, some Christian women said that they do not do these things and that the Christian husband does not mind that they sleep beside him. However, some Christian respondents who have a husband that professes the traditional religion still must keep these rules. Menstruating women also are not allowed to attend rituals, burials, and so on.

Birth control

Some respondents (9) used a contraceptive as birth control.

“After my pregnancy, I started with family planning because I have to plan when I will get a child again. Stichting Lobi has recommended that I use this [IUD].” (Nilla, 24, Pentecostal, Secondary high)

“I have set some goals for myself. And you know that with the education you get opportunities, you get information, you learn to make choices. And then it is up to you if you do something with it or not. I have done something with it, so I planned, at the age of twenty, I want my first child. But it came much later. At the age of 20, I want my first child, so when I am 30, he will be ten years old. So, in that way. To plan it like that, I also used contraceptives. Then we got, at the MULO, we got an information session from Stichting Lobi, and you received guidance. And I then

joined. So, I have been guided by Stichting Lobi all these years. And at a given moment, I stopped taking the pill." (Imena, 39, Roman Catholic, High)

"Because I do not want to have children anymore. The doctor asked me because I am already above 40 to use something. I can't get pregnant anymore because I am already above age." (Desta, 45, Roman Catholic, Secondary low)

Irregular menstruation

Few respondents used a contraceptive to regulate their menstruation.

"I told you earlier that my period is irregular, and the gynecologist had advised me to use the pill." (Zuri, 29, Pentecostal, High)

Prevention of sexually transmitted infections

A few respondents (2) said that they are using a contraceptive for protection against sexually transmitted diseases.

"But to protect yourself against diseases and so on, it is good for me. Yes, because you never know what your partner may be doing. Even if you trust him, you do not know what he is doing outside, that's why." (Femi, 19, Roman Catholic, Secondary high)

"So, let me say for two things, because usually when you meet someone, you do not know how long the relationship is going to last and what kind of relationship it is. You are going with a condom because you have just met the person. You do not know if that person has a disease. Only when that person says I am ready to step in a relationship, you are going to do a test first. And if, for example, we are two months together and we do not use a condom, and I get pregnant, and you tell me tomorrow it is not your child. So, because of that and such things. And if we are serious, then we do a test, then we use such things." (Wina, 29, Roman Catholic, Primary)

Delay menstruation

Respondents were asked if they also use the pill to postpone their menstruation. The researcher asked this separately because she read in an article that some Maroon women used the pill to delay their menstruation when their husbands were returning from a long time working (Vernon, 2018). Delaying the menstruation allows the woman to be intimate with her husband/partner after being away for such a long period. When a Maroon woman

has her menstruation, she is not allowed to sleep with her husband/partner in one bed. The pill is not only used to prevent pregnancy but also to delay menstruation.

Maroons believe that the practice of menstrual seclusion protects from contaminating the man's ritual powers or medicinal powers (S. Price, 1996).

Some respondents (5) recalled that they have used (or heard) a contraceptive for a specific reason/circumstance to postpone their menstruation. Reasons to defer the menstruation could be to be intimate with the husband after being away for a long time, to attend an event such as funerals, or parties.

"But I did it too. Because like I said, my husband is going away for a long time, and by the time he returns, I prefer that I do not menstruate. And sometimes it can coincide, and then I also take extra pills to postpone it." (Imena, 39, Roman Catholic, High)

"I heard about it. For example, when we had a death, I was going to have my period, and the day, I think it would have come in the week that my aunt was going to be buried, then I took it." (Feechi, 31, Pentecostal, High)

"The pill I never used. I used it once. At the time, I had my first child already, and I went to a party. Because I was going to have my menstruation, so, I did not want it to come at that moment. Then I used it. Then I got sick. All I did was vomiting. I never used it again." (Tabia, 42, Roman Catholic, Primary)

Women's reasons *not* using Contraceptives

Respondents also reported reasons for not using a contraceptive method. Being sexually active and not using a contraceptive method increases the risk of becoming pregnant.

Most respondents mentioned side effects, such as gaining weight, vomiting, nausea, causing cancer or other diseases. A few respondents did not have any reason for not using a contraceptive. One respondent learned from the Bible that using contraceptives is a sin. One respondent finds that there are women who are not able to have children; that is why she cannot use a contraceptive. One respondent fears injection and is afraid that she will either lose weight or gain weight when using the pill.

No reason

Few respondents (3) mentioned that they did not have any reason for not using a contraceptive.

"No, why should I? My boyfriend knows I am going to school and he is also going to school. So, he is not going to get me pregnant. I am using my brain. My brain is my best contraception." (Morowa, 18, Roman Catholic, Secondary high)

"I did not use it. (I: did you have a reason?) No." (Mudiwa, 50, Traditional, No school)

"It worked, but I just stopped." (Subira, 18, Traditional, Secondary low)

Not sexually active

Some respondents (6) are currently not sexually active, so they are not using a contraceptive.

"I do not have anyone." (Hasani, 24, Moravian, Secondary high)

"Because I have nobody now. (I: you are not sexually active?). Yes, that's it; I am not sexually active." (Anaya, 24, Pentecostal, Secondary high)

Religion

One respondent mentioned that for a religious reason, she does not use a contraceptive. Using contraceptives is a sin.

"You also learn it from the Bible. If you use these things, it is a sin. You must make children." (Fayola, 41, Pentecostal, Secondary low)

Side effects

Most respondents (8) are not using a contraceptive because they either experienced or heard about the side effects. Mostly young respondents (6) talked about side effects.

"I feel nauseous as if I were pregnant, that's why. And I feel so weak. I cannot do anything. I cannot wash dishes and so on. I sleep all day." (Binta, 18, Pentecostal, Primary)

"With the injectable, you cannot menstruate for three months, and that might induce disease in your tummy. Because, as a woman, you must menstruate. If you do not menstruate, then the

blood that is going to solidify remains there, and maybe you can suffer vaginal blood loss through that clotting. I do not like swallowing tablets so much." (Nilla, 24, Pentecostal, Secondary high)

"Because often when you use the pill, the person who uses it, maybe it will make you skinny and I am getting fat. Not for me because maybe I use it, then I get fat. And I am fat already, and I do not want to get fatter." (Amina, 20, Pentecostal, Secondary low)

"That injectable contraceptive also has a disadvantage. I also used it. But when you go, they give you information also, the advantages and disadvantages of it. It is causing cancer. I went to Stichting Lobi. The nurse gave me the information. But after the information, they ask you, "do you still want it"?" (Feechi, 31, Pentecostal, High)

"I never used the pill. And they have said it depends when you are also using it. Some people become thin, and some people get fat. So, I do not know how to deal with it. I never bought it because they have also said it is also not good for your body." (Sanaa, 22, Pentecostal, Secondary high)

Fear

One respondent said that she is not using a contraceptive out of fear.

"My opinion? Hmm, using contraceptives? I do not dare use it. I do not know. (I: Do you have reasons? Did anyone tell you anything? Did something happen to anyone?) R: No. certain people say it makes you thin. It is going to make you fat. So, I am scared. What is going to happen to me? Am I going to gain weight? Am I going to lose weight? (I: Ok, ok.) R: When I must take an injection, I always cry. So, I am not going to do that. And that what they put in your arm. I am simply scared." (Falala, 26, Pentecostal, Secondary high)

Other

One respondent does not like to use a contraceptive because other women are not able to have children.

"Because I do not like it. Because I find it so dull when certain women cannot have children." (Binta, 18, Pentecostal, Primary)

The main reason for using a contraceptive method is to prevent pregnancy. The main reason for the non-use of contraception is concerns about side-effects and not being sexually active.

Women do not need to use contraception as a method of fertility control. Women may use a method to regulate their menstruation.

Using a method to control fertility may indicate a limitation of family size. Hence leads to lower fertility levels.

Women's view on Contraception

Women's attitudes toward contraceptives may also determine the usage of contraception.

Many respondents think that contraception is suitable for birth control and protection against sexually transmitted infections (STI's). A few find that contraceptives are not reliable. Another respondent mentioned that Maroons do not talk about contraceptives with their children. One respondent said that God gives children. Therefore, one should not remove the child. Some respondents find that one should not use a contraceptive for different reasons such as the ancestors were not using it so why should the offspring use these things; she also sees it as abortion since the sperms die in the condom. One wants children, and another accepts the pregnancy/child as it comes.

Birth control

Some respondents (12) indicated that contraceptives are good to use as birth control. Six of those respondents are in the young age groups 15 to 29.

"The pill is good on one side. It prevents unintended pregnancy, right. So, you can plan pregnancy with it." (Arjana, 38, Pentecostal, Secondary high)

"If you do not want to have children, you can use a contraceptive method then that you commit abortion." (Ebele, 43, Pentecostal, High)

"Look, maybe you still go to school, you do not want children yet. You want to finish your studies. Then you use a contraceptive method." (Femi, 19, Roman Catholic, Secondary high)

"I find it good. I recommend it to all women. Women should rather use a contraceptive method than to have thousands of children. That you have so many children that you cannot take care of them." (Nilla, 24, Pentecostal, Secondary high)

"Of contraceptives? I think it is good that they use it, because, for example, when I look at the Maroon community, then I see that they do not use it much. So, they have a lot of children. I see it with my sister, for example. She has 14 children, and she's complaining." (Falala 26, Pentecostal, Secondary high)

Sexually transmitted infections

Some respondents (6) stated that contraceptives could protect you from sexually transmitted diseases.

"It is excellent because you can protect yourself against sexually transmitted diseases. But you can also prevent pregnancy, 90%. Yes, that's why." (Sheen, 55, Pentecostal, Primary)

"Condom, I would want to use that to prevent sexually transmitted diseases in your body." (Deka, 16, Roman Catholic, Secondary low)

"*I find it good. You are going to say that you have a man, but you do not know if he is unfaithful. So, then I find it important. Ok, but nowadays, if you have a man at home, of course, he does not want a contraceptive." (Desta, 45, Roman Catholic, Secondary low)*

Cultural/Religious

One respondent said that it is God who gives children so you cannot remove the child.

"I do not like it at all because you do not just get a child. (I: Why?). Because do you know why? Some people cannot make children. God gives you a child, and when God gives it to you, then you should not remove it. That is why I do not like it." (Binta, 18, Pentecostal, Primary)

Do not use

For various reasons, some respondents (5) find that one should not use a contraceptive.

"So, the best-known method we know today is the condom. Ok, you also have the pill, the morning after pill, all that kind of stuff. God gives knowledge about a particular medicine or something that you can use to disguise it. But compared to those people back then, they did not use those things. So, I think it is a bit of a shame that we, let me say, the offspring [meaning the descendants of runaway Maroons] and the other generations should use this kind of thing because it remains the same as abortion. You just kill children. You use a condom. Your sperm goes in it. You throw it away. Those are dead." (Anaya, 24, Pentecostal, Secondary high)

"I do not use the pill, so it has no advantage for me, because I want children. I am looking for children. So, I do not use the pill." (Kesia, 43, Pentecostal, Primary)

“I do not use them. When it comes, then it comes [child].” (Fayola, 41, Pentecostal, Secondary low)

Maroons attitude

One respondent pointed out that Maroons are not accustomed to talking about contraceptives with their children.

“Maroons never talk with their children about contraceptive methods.” (Maaza, 33, Pentecostal, High)

Not reliable

Few respondents (2) find contraceptive unreliable.

“With a condom, you are not sure if the man is wearing it properly. It can rip, and you can get pregnant.” (Ebele, 43, Pentecostal, High)

“But I am not in favor of IUD, because I am told that some women just get pregnant despite having an IUD. And I do not know how it is called. It has a nice word. Before the man ejaculates that he withdraws, but I do not know anymore, how it is called. But I find it dangerous because there can also be precum, and as I have learned in school that also in your precum, you can have sperm cells, and these can also fertilize you. But after tying, then you can lose it again [she means sterilization]. But then I do not know if you can easily get fertilized. So, I am not in favor of that. You also have an injectable contraceptive. I am also not in favor of that, because you do not know when you will have your period.” (Zuri, 29, Pentecostal, High)

All the women were knowledgeable about the purpose of contraceptive methods and could name a few ways to prevent pregnancy. Despite the knowledge, the attitude of contraceptives differs. A negative attitude may decrease the use of a method. On the other hand, a positive attitude does not mean that one will use it.

Ways to get pregnant

Ways to get pregnant indicate that methods or techniques of fertility regulation exist that influence fertility positively if they are efficient.

Many women talked about the use of herbs to get pregnant. Some talked about the massage of the uterus, rituals, folic acid, castor oil. On the other hand, some are not aware of cultural methods that could stimulate pregnancy. One respondent indicated that it is God who makes pregnancies happen.

Do not know

Some respondents (5) stated that they are not aware of the existence of ways that can stimulate fertility.

"No, I do not know them, only my grandfather." (Nala, 30, Pentecostal, Secondary high)

"I do not know." (Subira, 18, Traditional, Secondary low)

God

One respondent indicated that if you get pregnant, it is God who lets it happen.

"If it is to succeed, it must come from the Lord." (Ebele, 43, Pentecostal, High)

Other

Some respondents (5) mentioned other things, such as castor oil and folic acid that helps a woman to get pregnant.

"You can use Castor oil." (Ebele, 43, Pentecostal, High)

"No, I only know folic acid. I do not know methods." (Hasani, 24, Moravian, Secondary high)

"I do not know much about herbal things. So, it is after I got married that I heard of that folic acid. I started reading about it, that you can use that for when you want to get pregnant. And, during your pregnancy, because that is also for that child's bones during your pregnancy. If you want to get pregnant, you can use it. As for herbal things, I do not know." (Falala, 26, Pentecostal, Secondary high)

Rituals

Two respondents talked about rituals to help the woman to get pregnant.

"Not really. But sometimes people believe in reincarnation. Sometimes you must do a ritual so that this person can have children again. Because for example, if somebody has died pregnant

and that person returns [reincarnated] then that person, if she is a girl, she can have a problem." (Feechi, 31, Pentecostal, High)

"They also know how a person can get pregnant. But it is difficult sometimes. Sometimes the person can do a traditional thing first in the interior. Before they come, they can use a thing that you give them. But some people, if you give them the medicine, they get pregnant like that [quick]." (Sheena, 55, Pentecostal, Primary)

Use of herbs

Many respondents (26) mentioned herbs can be used to stimulate pregnancy in women who cannot (easily) get pregnant.

"Kowroe dresie, moeroe dresie [herbal medicines]. Yes, you have different kinds. I got my son by taking a kowroe dresie." (Amina, 20, Pentecostal, Secondary low)

"That "kowroe dresie," they say that you drink it. And when you are clean, then you can get pregnant." (Niah, 32, Moravian, Secondary low)

"With Maroons, when a woman gets fewer children, or she cannot get children, herbs are cooked so that she can become fertile. I do not know these herbs." (Zizi, 38, Roman Catholic, Secondary low)

"It is a mixture of certain roots of trees, dry roots, and, also, wood types, certain wood types. It is cut down and then mixed with other herbs. It is cooked. Then you drink it to cleanse inside of you. It is not only used, let me say so that the woman can get pregnant, but it is also used so that the woman is cleansed, for example, during the menstruation. But, of course, she must use it before the menstruation. When she menstruates, her uterus is cleansed because the blood glands of some of them remain stuck. That is not allowed. So that they can come out freely, then that is also used. It is a perfect one. I used it too. I had more pains when I started my period, and afterward, I had less pain." (Anaya, 24, Pentecostal, Secondary high)

Uterus massage

A few respondents (5) reported that someone could massage the uterus of the woman when she has difficulty getting pregnant.

"A Masseuse. A woman who can get children difficult is massaged." (Maaza, 33, Pentecostal, High)

“Some people can also massage it [uterus]. You have of those old women who know exactly how to turn it around so that you can get pregnant.” (Zuri, 29, Pentecostal, High)

There are ways to help a woman who has difficulty getting pregnant. If these techniques are effective, they will influence fertility positively. Some appear to be successful after listening to some of the women.

People

Respondents find that older persons can make herbal drinks and doing the massages.

Most respondents mentioned that older persons or knowledgeable persons could make these cultural methods. The person must know the various leaves/plants and other things that are used. Also, persons should know how to massage the uterus into a position that prevents/allow pregnancy.

Some respondents (9) also mentioned that the elderly, knowledgeable people could make these herbal medicines or do the massages.

“My father had that knowledge. He helped many people.” (Ebele, 43, Pentecostal, High)

“Older people who know it will cook [an herbal drink] in a pot.” (Nubia, 16, Roman Catholic, Secondary low)

Beliefs of using ways to get pregnant

Although there are ways to help one to become pregnant, there are also consequences for using some of these methods.

One respondent mentioned that she heard of a possible consequence that one might likely experience when doing the uterus massage.

“I do not know if it is true, but I heard that it could have consequences, especially that of massage. For example, if an older woman has massaged you, I do not know how they put the uterus. After you have several children and if you want to stop, the same person should massage you again and put it back in the original position. But if the person dies, you have a problem. Then you would

have to do something else. Because I think that they believe somewhere that the one who has put it has to take it off again." (Zuri, 29, Pentecostal, High)

Ways to prevent pregnancy

Ways to avoid pregnancies indicate the existence of fertility control.

Many respondents are not aware of the existence of a traditional or cultural method for the prevention of pregnancy. Some respondents mentioned various cultural practices, such as using herbs, uterus massage. Traditional techniques were coitus interruptus and rhythm. Some knew only about modern contraceptives. A few knew about home remedies like warm coca-cola, castor oil, warm beer.

Not aware

Most respondents (16) stated that they are not aware of a cultural method that can prevent one from getting pregnant. Older respondents (11) reported that they were not aware of the existence of a traditional way to prevent someone from getting pregnant.

"Well, for home remedies, I have no idea. But you have the pill. You have IUD. So, those things I know you." (Wina, 29, Roman Catholic, Primary)

"Apart from contraceptive methods? No." (Feechi, 31, Pentecostal, High)

Modern contraceptives

Many respondents (13) mentioned the use of modern contraceptives when they were asked if they know somethings that can prevent a woman from getting pregnant. The younger respondents (8) seem to mention modern contraceptives more than the older respondents.

"The pill, injectable, condom, IUD." (Nilla, 24, Pentecostal, Secondary high))

"I know only the pill, stop tablet. Those are from the doctor." (Amina, 20, Pentecostal, Secondary low)

"You can just go to the clinic to ask for the pill and condom." (Subira, 18, Traditional, Secondary low)

"To avoid getting pregnant? Then those are the 'bakra[46] sanie' [things] that the ' bakra' gives." (Semira, 32, Traditional, Secondary low)

Other

A few respondents (3) talked about other things that can be used, such as a warm cola, warm beer, and castor oil.

"You have cola, warm cola, and then you boil it with salt." (Alika, 15, Moravian, Primary)

"Some drink the "castor oil." (Deka, 16, Roman Catholic, Secondary low)

"A whole lot of other things, for example, they say warm beer. But I keep saying when God says this is gray, then it stays gray [She means when something must happen, then it will happen]. Nobody can remove it. No matter what you are going to do, no matter what you are going to drink or what, it is not possible. Ok, unless you are going to commit abortion, ok, then it is a bit different again." (Anaya, 24, Pentecostal, Secondary high)

Use of herbs

Some respondents (4) indicated that the use of herbs could also prevent pregnancy. The same medicines that are used to stimulate pregnancy can also be used to avoid pregnancy. But it is not clear if the same herbs are used or other kinds of plants.

"Yes, the same drink that I just mentioned. Yes, that's why people, if they know that the lady has sex, they do not let her drink. The same drink. (I: Is that moeroe dresie?) Yes, if you drink that. Suppose if you know that you are fertile, and you have sex. You know that you are pregnant. Maybe three weeks or so, six weeks or so, and then you drink it. The same way you would menstruate, the same process. It removes everything. Yes. It has certain things. It has a specific pepper in it, and apart from that pepper, it has something bitter and other unique things. It removes everything. That medicine is like blood. It is dangerous. Yes, someone told me the person had asked him to make that same medicine, and then the person asked, why do you need it? And the person said to cleanse me. But it was not the truth. And of course, people who believe in God,

[46] Bakra is a complex concept. depending on the context it can mean white people or people from the city, or foreign, or non-Maroon. (Terborg, 1999; Hoogbergen, 1992/2015; Pires, 2015).

then that person said 'God if this is I am doing now if it is to cleanse that person's uterus, let it happen that way, but if it's not for that, let it fail.' And indeed, it failed. It did not go away. That person to this day, that child has grown up. It is dangerous. That medicine that I mention is dangerous. It is like antibiotics. That's why they do not just prescribe antibiotics." (Anaya, 24, Pentecostal, Secondary high)

"You can prevent the process at an early stage, because here in the city, you would use a morning-after pill. But there [interior] if you suspect something is not right, then you can use certain herbal mixtures to wash it clean." (Imena, 39, Roman Catholic, High)

"Yes, like some leaves. If you drink some leaves." (Morowa, 18, Roman Catholic, Secondary high)

"*Moeroe dresie." (literally uterus medicine) (Mudiwa, 50, Traditional, No school)*

Uterus massage

One respondent mentioned the use of massage to prevent pregnancy.

"Yes, the massage. I have been informed; your uterus mouth should be where the vagina is, then you can have a child. Otherwise, they can massage it in the other direction. I heard the Javanese also do it. (I: ok, yes, I heard that also). Usually, when they have teenage girls, then they massage the uterus in another position so that the girls do not become teenage mothers, and then they massage it again when they are ready [to have children]. Yes, so massage can, but I don't know anything else." (Zuri, 29, Pentecostal, High)

Coitus interruptus

One respondent referred to coitus interruptus as a method to prevent pregnancy.

"I know ejaculation." (Zizi, 38, Roman Catholic, Secondary low)

Women are aware of methods to avoid getting pregnant. Knowing, having a positive attitude, and having access does not automatically lead to the use of a birth control method, even more so as they indicate that they must provide offspring.

First time used a contraceptive

First time used looks at the time when the respondent started to use a contraceptive method. Most respondents practiced birth control after having a child or several children.

It points to the fact that there was no fertility control.

Many respondents used a contraceptive for the first time when they already had children. A few had used contraceptives before having their first child.

Before having a child

A few respondents (2) said that they used a contraceptive before getting pregnant since they planned when they wanted their first child.

After having a child

Most respondents (11) pointed out that they started using a contraceptive only after having a child.

"I began to use it after my first son. And after the second son, I used it." (Ebele, 43, Pentecostal, High) "Almost 40 years, when I had my third child." [She meant 40 years ago, after her third child. I believe she did not know precisely how long ago; she knew that she began using a contraceptive method after her third child]. (Sheena, 55, Pentecostal, Primary)

"When I was 19 years old. After the birth of my second child." (Arjana, 38, Pentecostal, Secondary high)

"When my daughter was six months old." (Nilla, 24, Pentecostal, Secondary high)

No child yet

A few respondents (2) indicated that they are using a contraceptive but do not have children yet. Both were young respondents.

Many women did not practice fertility control at the start of their childbearing life, despite being aware of methods of prevention. Not using birth control at the beginning of being sexually active also reveals that knowledge and access do not spontaneously result in using contraception.

Influence on Women's contraceptive use

Others can also influence respondents' decisions concerning contraceptive practice. The impact affects preventive behavior.

Most respondents decided to use contraceptives by themselves. Some decided together with their husbands/partners. In a few cases, the husband/partner decided. A few respondents said that they chose based on the advice of the doctor. One mentioned that she received support from her husband when she wanted to use a contraceptive.

Wife's decision

Some respondents (6), mainly older women (4), chose to use a contraceptive.

"No, no. I chose it myself because I suffer from high blood pressure." (Niah, 32, Moravian, Secondary low)

"*I decided myself." (Subira, 18, Traditional, Secondary low)*

Husband and Wife

A few respondents (3) reported that both decided to use a contraceptive.

"I decided together with my partner to use a contraceptive." (Desta, 45, Roman Catholic, Secondary low)

"We both decided to use a contraceptive method." (Sanaa, 22, Pentecostal, Secondary high)

Husband's decision

A few respondents (2) mentioned that it was the husband/partner who made the decision.

"He has decided." (Femi, 19, Roman Catholic, Secondary high)

"Because he wants me to study." (Nala, 30, Pentecostal, Secondary high)

Support

One respondent said that she could just tell her husband/partner to use a condom.

“There are those days when I say to him, let’s use a condom.” (Arjana, 38, Pentecostal, Secondary high) [she means on days when she is more fertile because she uses the ovulation method]

Medical practitioner

A few respondents (2) made the decision based on the advice of their medical doctor. One of the respondents was getting pregnant fast. The other respondent was over the age of 40 and had six children.

Some women decided on a method, while others influenced the decision concerning the control of their fertility. The women’s role in decision-making concerning contraceptive use indicates that women can make decisions related to their fertility. The husband’s involvement shows either gender equality or gendered power relations that influence contraceptive (non-use) use.

Husband’s view on contraceptive use

The husbands’ attitudes might affect the contraceptive behavior of the respondents.

Most respondents said that their husbands/partners agree and even encourage them to use a contraceptive. On the other hand, some respondents indicated that their husbands/partners did not want them to use a contraceptive for reasons such as he thinks that she will not be able to get pregnant; he wants children. He only has one wife; therefore, he does not see the need to use a contraceptive. Some respondents did not know how their husbands/partners feel about contraceptive use.

Do not know

Some respondents (4) did not know their husband’s opinions regarding contraceptive use.

Good

Most respondents (10), mainly women (8) in the old age groups, indicated that their husband/partner was positive about the use of a contraceptive.

"He recommends me to use it." (Niah, 32, Moravian, Secondary low)

"He also finds it good because he had said 'you are still going to school.'" (Sanaa, 22, Pentecostal, Secondary high)

"He finds it normal. I started with it when I had my child, because he found that I was still young." (Zizi, 38, Roman Catholic, Secondary low)

Not good

Some mentioned (7) that their husband/partner did not like/wanted them to use a contraceptive. A few respondents (3) are young women.

"He says that I cannot take it. I will not be able to make children anymore." (Binta, 18, Pentecostal, Primary)

"He *does not like it because he wants to have a child. I have told him if you do not marry, you do not get a child." (Nilla, 24, Pentecostal, Secondary high)*

"He assumes that he only has one wife, so he has no reason to use it." (Imena, 39, Roman Catholic, High)

The husband's attitude regarding contraceptives may influence women's contraceptive behavior. There are husbands/partners with a positive attitude and others with a negative attitude. The position may affect (non-use) use.

Family's view on contraceptive use

Families' attitudes can also impact the contraceptive behavior of the respondents, which consecutively influence reproductive outcomes.

Most respondents stated that their families do not want them to use a contraceptive method, while some respondents said that their families do not mind them using a method. A few respondents reported that their families do not intervene; this shows that most likely,

some of these families agree. Some respondents also indicated that their families do not talk about contraceptives. A few respondents could not say what their families think about contraceptive use.

Do not intervene

A few respondents (3) (two of them are young respondents) declared that their family leaves the decision to them whether they would use a contraceptive or not.

"The family leaves the choice to me. My aunt also uses the IUD, and I asked how it was, and I opted for that." (Nilla, 24, Pentecostal, Secondary high)

"I *do not think they would make a problem of it. Even if they give their opinion, you must decide if you are going to do it or not. That is how we are brought up. For example, I would not do it, but you are mature enough to determine what you want or not want." (Zuri, 29, Pentecostal, High)*

Do not know

A few young respondents (2) reported that they did not know what their family thinks about the use of contraceptives.

Do not talk

Some families do not talk about contraceptives.

Some respondents (4) said that their family does not talk about contraceptives.

"They know nothing about it. I also do not talk about it." (Niah, 32, Moravian, Secondary low)

"They say nothing about it." (Subira, 18, Traditional, Secondary low)

Do not use

Most respondents (11) indicated that their family does not want them to use any contraceptive.

"They take it too seriously. They do not want it." (Morowa, 18, Roman Catholic, Secondary high)

"Sometimes, they say that they do not want you to use it, but you are not going to tell them that you are using because otherwise, they are going to get angry." (Desta, 45, Roman Catholic, Secondary low)

"From my mother, we are not allowed to use it." (Fayola, 41, Pentecostal, Secondary low)

Use

Some respondents (7) mentioned that their family allows them to use a contraceptive method. Four of them are women in the old age groups 30 and over.

"My mother always taught me I could use a condom, but not medicine things and so." (Amina, 20, Pentecostal, Secondary low)

"Now, it is normal. They rather opt for the pill because, for example, with the contraceptive injection, you must menstruate after three months, I think, but with those tablets, you menstruate regularly." (Zizi, 38, Roman Catholic, Secondary low)

The attitude of the family related to contraceptive use may influence the contraceptive behavior of women. Some families agree, others disagree or do not intervene.

Reason Family's view on contraception

The reason explains why the families of the respondents approve or disapprove of a method to prevent pregnancy.

There are differences in families. Some respondents talked about their educated families and not educated families, modern and traditional families, who accept/allow while others do not want contraceptives at all. They want the respondent to have children. Most respondents said that their families are looking for offspring. An example is from one respondent who mentioned that her grandmother thinks that the tablets (the pill) will accumulate in the belly, and you will get infertile. In the past, older people did not use contraceptives.

Differences in Family's view

Few respondents (3) mentioned that there are differences in the family's perspective. Some families are educated or modern, while others are more traditional. Therefore, these families have a different opinion regarding contraceptive use.

"You have two groups in the family, old- fashioned and modern. The former says, "your children are your wealth; you must make children." "joe tjien na joe goedoe, na tjien joe moes mekie." The modern say, if you cannot, use something to prevent it because you cannot take care of the children. But in the end, you stand alone for the consequences." (Ebele, 43, Pentecostal, High)

"Those who are educated, I see that they understand it. And some of them do not understand. If you are less educated, you might have a wrong impression about something, but if you are educated, you'll understand better." (Nilla, 24, Pentecostal, Secondary high)

"*Well, actually, it is different in the sense in which environment you are. If you are in an environment where many people are educated, they find it wise that you use the pill, and you must complete your studies and wait with children and what more. Or that you have just given birth and that you wait, so you must use the pill. But if you are in an environment where one finds children important, then you certainly get those kinds of accusations because you do not get pregnant, how come you do not get pregnant. Are you on the pill, and what more? But then it seems more like an accusation. So, I experience it differently. My in-laws who live in the other world because they have fewer people who are educated, and they are completely into the culture. So, having children is essential. My mother-in-law, who always asks me, 'when will you have children'? But in my family, many people are much more, not much more, but a little educated. And then you get to hear it, yes, but her study is essential. So that is how it differs. It depends more on the environment where you are. The people in your environment." (Imena, 39, Roman Catholic, High)*

Offspring

Most respondents (6) indicated that the family is looking for offspring, thus not supporting the use of contraceptives.

"My mother finds that she wants to have more grandchildren. So, I use the pill, and she does not like it." (Nala, 30, Pentecostal, Secondary high)

"*We do not have many children in our family. So, my family does not like contraceptives. All of us are looking for children." (Kesia, 43, Pentecostal, Primary)*

"They take it too seriously. They do not want it. It is like it does not matter if you get a child with the age of 16. You got to be girly [she means that you must be 'woman enough'] enough to take care of your child. (I: why don't they want?) because you're a woman, and you're here to give birth." (Morowa, 18, Roman Catholic, Secondary high)

Other

One respondent reported that her mother is from the church, so it is not allowed to use a contraceptive.

"My mother does not allow it. (I: Ok. Why?) Because my mother is from church. (I: Ok, ok.) Yes, she raised us like that. You are not going to use contraceptives. If you are pregnant, you must bear that child even if you are young, also if you are old. You must carry it." (Fayola, 41, Pentecostal, Secondary low)

One respondent said that her mother never used a contraceptive.

"From my mother's side. My mother finds that she has never used a thing to close the uterus. Because let us say, you are closing your uterus. She has never used those "bakra, bakra" things to close the womb or to get an abortion. Everything that God gives she [the mother accepts what God gives] takes." (Semira, 32, Traditional, Secondary low)

Present- past

One respondent said that the use of contraceptives was not allowed in the past.

"With older people, it was forbidden. They say you are committing abortion. You do not want to have children, "joe ey kier deng tjien" [meaning You are killing the children]. In the past, it was taboo." (Ebele, 43, Pentecostal, High)

Prevention sexually transmitted infections

One respondent mentioned that her mother finds a condom useful because it protects.

"Well, they say I must use it because it's essential. It protects you. (I: do you know what they would say that is essential to use? Do you know which contraceptive method they would say "use this"? Which one would they choose then?) R: my mother always wants the condom." (Binta, 18, Pentecostal, Primary)

The family's attitude is related to their approval or disapproval of contraceptive use. Some families expect offspring and will, therefore, disapprove. One's social environment may influence their decision.

Contraceptive awareness

The awareness of the existence or availability of methods to control fertility may influence the contraceptive choice of the respondents.

All respondents were familiar with the various contraceptives, but that does not mean that they were using a method. The pill is the best-known method, followed by the condom, IUD, and contraceptive injection.

Knowledge about contraceptives was universal.

Contraceptive education

Respondents receive information about methods and their application through various sources. Respondents are empowered to make decisions regarding contraceptives.

Respondents are informed about contraceptives mostly at school and by medical professionals such as the medical doctor and the family planning institution of Suriname (Stichting Lobi, which means Love Foundation). Some respondents learn about contraceptives from friends and relatives. Others get information about contraceptives from other sources such as the internet, TV, workshops.

Medical Professional

Some respondents (9) mentioned that a medical professional informed them about the use of contraceptives.

"When you gave birth, then the nurse encourages that you should use that." (Lesedi, 44, Pentecostal, Secondary low)

"Then the doctor gave it to me. My husband was not here. He told me when my husband comes, we, then, must come together to see him." (Sheena, 55, Pentecostal, Primary)

School

Most respondents (16) were informed about contraceptives in school during a lesson about reproduction in the nature education course at the primary educational level. Many of them (10) are in the young age groups 15 to 29.

"I think since the sixth-grade primary school, you learn." (Sheena, 55, Pentecostal, Primary) "So, I get classes in school, nature education [it is a course like Biology]." (Deka, 16, Roman Catholic, Secondary low)

Social network

Few respondents (4) learned about contraceptives from their friends or relatives.

"I know it from my friend that if you do not want to have children, then you can take the pill, then you will not get children. And when you stop with it, then you get pregnant." (Tabia, 42, Roman Catholic, Primary)

"From school, from friends, from the internet." (Hasani, 24, Moravian, Secondary high)

"No, in school from some children. They told me when you take the pill. I have heard it has steps, right? [the pill that she talks about has instructions on how to use it] There is an arrow. Yes, I learned in school." (Amina, 20, Pentecostal, Secondary low)

"I do not know what that's called, but there's something that you put in your arm. I saw that with my cousin. She went to the French side [French-Guyana] to put it. You do not see it. So, when you look, you do not see anything." (Falala, 26, Pentecostal, Secondary high)

Other

Some respondents (6) have received information about contraceptives through various media such as searching on the internet, by watching the TV, by reading, participating in a workshop, or a youth organization.

"I am curious. I read a lot. I also watch TV." (Zizi, 38, Roman Catholic, secondary low)

"I participated in a workshop. Yes, it was during the fair. Then I had to explain to people. I had followed a course, that's why I know about these things." (Femi, 19, Roman Catholic, secondary high)

Through receiving information about contraceptives, women are empowered to decide to control their reproductive lives.

Contraceptive education helps to increase and spread knowledge of available methods, which enables women to make informed decisions. The informed person can share knowledge about contraception because, for instance, friends or relatives told a few respondents.

Access Contraceptives

Greater access to contraceptives may result in higher levels of contraceptive use.

Respondents get their contraceptives from different places such as the medical doctor, pharmacy, family planning clinic (Stichting Lobi), or elsewhere.

Elsewhere

Some respondents (6) indicated that either they or their partner get the contraceptives from places. These places are, for instance, the market, or at school.

“So, where my boyfriend goes to school, he always gets to take home.” (Femi, 19, Roman Catholic, Secondary high)

“B*ut I could also buy it in the market.” (Ebele, 43, Pentecostal, High)*

Family planning clinic

Some respondents (4) have received their contraceptives from the Family planning clinic.

Medical practitioner

A few respondents (6) get their contraceptives from the doctor.

Pharmacy

Few respondents (2) said that they buy their contraceptives at the pharmacy.

Easy access makes contraceptive methods within reach of women. Thus, influencing the use or non-use of contraceptives. Contraceptive use delays childbirth and limits the number of children.

Pregnancy planning

Pregnancy planning reveals if fertility control is applied.

Most respondents did not plan their pregnancy. One of the reasons/explanations can be that women are expected to have children, and it does not matter if you are 16 years of age, as one of the respondents said. Furthermore, culturally, after the rites of passage that declares the woman as an adult, she is allowed and expected to have a husband. If the woman has a husband, she is expected to have children.

Most of these women start using a contraceptive after having a child, so not from before when deciding to have a child.

No

Most respondents (14) did not plan their pregnancies.

“I did not plan the pregnancy, but I have always said that I would not have an abortion.” (Nilla, 24, Pentecostal, Secondary high)

“No, the first one I did not plan, the second one neither, the pregnancy came suddenly, and I also had my son unexpectedly.” (Feechi, 31, Pentecostal, High)

“I did not plan.” (Makena, 40, Roman Catholic, Secondary low)

Yes

Some respondents (9) planned one of their pregnancies.

"The latter was planned." (Arjana, 38, Pentecostal, Secondary high)

"I have planned mine well." (Imena, 39, Roman Catholic, High)

"Partially, (I: Partially? Why partially?) because I wanted to become a flight attendant. And I thought when you are a flight attendant then you cannot have children anymore and that sorts of things. I thought I'd get her sooner." (Hasani, 24, Moravian, Secondary high)

Reason no pregnancy planning

Respondents who did not plan their pregnancy explained why they did not do that.

A few respondents mentioned why they did not plan their pregnancies. A few wanted another child, whereas one could not get pregnant quickly.

"My ex-husband. I have three children with two men. So, with my first man, I have two children. There was domestic violence there. That is why I moved to Moengo. When I returned to the city, I met the second. We were five years together, but I was not using the pill. I could not get pregnant. So, we wanted children, that is why I was not using the pill or other contraceptive methods. I just could not get pregnant, but miraculously I got a daughter." (Arjana, 38, Pentecostal, Secondary high)

"I was using the pill, and then we moved from my mother. And I said I would quit because I want another child. Then I stopped, and my girl came." (Dayo, 29, Pentecostal, Secondary low)

"No, I did not plan that. But later, I understood that you should not make a lot of children, and I could not have children also [she had difficulties getting pregnant easily]. Some women, when they give birth, sorry, and she has intercourse with her husband, she gets pregnant right away. No, I did not get pregnant right away. Almost three, four years later, I got pregnant." (Tabia, 42, Roman Catholic, Primary)

The presence of unintended/unplanned pregnancies indicates that there was no fertility control. The absence of fertility control increases the level of fertility.

Summary of contraception behavior

A persons' contraception behavior is influenced by their knowledge, view, and experience concerning contraception. People may either use or not use a contraceptive for various reasons.

Respondents view contraception mostly as suitable for birth control and protection against sexually transmitted infections (STI's). A few find contraceptives are not reliable. One respondent mentioned that Maroons do not talk about contraception with their children. Still, others believed that God gives children; therefore, one should not remove the child. Another respondent finds that the ancestors were not using it, so why should their descendants use these things; she also sees it as abortion since the sperm dies in the condom. One wants children, and another accepts the pregnancy as it comes.

But also, their environment might affect their contraception behavior. Husbands/partners of many respondents have a favorable attitude regarding contraceptive use, and some even encourage the use of contraceptives. On the other hand, some respondents indicated that their husbands/partners disapprove of their use for reasons such as believing that his spouse will not be able to get pregnant or he wants children. Another husband said that he has one wife; therefore, he does not see the need to use a contraceptive. Some respondents did not know how their husbands/partners feel about contraceptive use.

Families of some respondents do not want them to use a contraceptive method, while some reported that their families do not mind that they use contraceptives. A few respondents said that their families do not intervene; this shows that most likely, some of these families agree. Some respondents also indicated that their families do not talk about contraception. A few respondents could not say what their families think about contraceptive use. So, this shows that some family's contraception attitude is positive while other families disapprove.

However, there are differences among families. Some respondents distinguish their families between educated and not educated families or modern and old-fashioned

families. The former families accept/allow while the latter do not want contraceptives at all. The not- educated and traditional families wish that the respondent have children. Most respondents said that their families are looking for offspring. These families favor large families. Educated and modern families support the respondent for using a contraceptive. In the past, older people did not use contraceptives, according to a few respondents.

Many respondents know about modern contraceptives, but that does not mean that they were using a method. The pill is the best-known method, followed by the condom, IUD, and contraceptive injection. Respondents receive information about contraceptives mostly at school and by medical professionals such as the medical doctor and the family planning institution of Suriname (Stichting Lobi, which means Love Foundation). Some respondents learned about contraceptives from friends and relatives. Others get information about contraceptives from other sources such as the internet, TV, or attending workshops. Both young and older respondents are aware of different contraceptive methods and where to obtain these methods. Respondents get their contraceptives from various places such as the medical practitioner/doctor, pharmacy, family planning clinic (Stichting Lobi), or elsewhere. The most used contraceptive by women is the pill, followed by the condom.

Despite the knowledge and access to modern contraceptives, most respondents did not plan their pregnancy. Most of these women start using a contraceptive after having one or several children. One of the reasons can be that the family/lineage expects women to have children. Culturally, after the rituals for declaring the girl as an adult, a woman is permitted to have a husband. If the woman has a husband, she is expected/obligated to have children.

Many respondents were also aware of the existence of cultural methods to get pregnant. They talked about the use of herbs to get pregnant. Some talked about the massage of the uterus, rituals, folic acid, castor oil. On the other hand, some are not aware of traditional methods that could stimulate pregnancy. One respondent indicated that it is God who makes pregnancies happen.

In contrast, many respondents are not aware of the existence of a cultural method for the prevention of pregnancy. Although, some respondents mentioned various cultural techniques such as using herbs, uterus massage. Most respondents knew only about modern contraceptives. A few respondents indicated traditional methods such as coitus interruptus and ovulation method (rhythm). A few knew about home remedies reporting warm Coca-Cola, castor oil, warm beer.

People's experience with contraceptives also impacts their contraception behavior. Some respondents had a good experience with contraception, while others experienced side effects. Women said that contraceptives are useful since they helped them avoiding pregnancy. Some of these side effects were gaining weight, feeling sick, and having menstruation problems. One respondent mentioned the failure of contraceptives.

Reasons for using or not using contraceptives may give an explanation or understanding of the level of contraceptive use. These reasons may provide factors that prevent or motivate the use of contraceptives. Most respondents are using or have used a contraceptive as birth control. Few respondents used contraceptives to regulate their menstruation or to protect themselves against sexually transmitted diseases. Respondents also reported reasons for not using contraceptives. Most respondents mentioned side effects, such as gaining weight, vomiting, and nausea. A few respondents did not have any cause for not using a contraceptive. One respondent learned from the Bible that using contraceptives is a sin. One respondent finds that some women are not able to have children; for this reason, she cannot use a contraceptive. One respondent fears injection and is afraid to either lose or gain weight when using the pill.

The quantitative findings in section 4.2.4 points to breastfeeding having increased even among the young Maroon women; this practice certainly had prolonged infecundability.

Postpartum practices may influence pregnancy outcomes. Respondents breastfeed their children, abstain from sexual intercourse after birth for a period, and practice other reproductive rituals.

Prolonged and intense postpartum practices can reduce reproduction. On the contrary, declines in postpartum practices may increase fertility in case no other forms of fertility control are practiced (Nag et al., 1980; Coale, 1984).

4.3.5 Postpartum practices

Breastfeeding is a fertility-inhibiting determinant that influences reproductive outcomes.

Practice of Breastfeeding

Most respondents practice breastfeeding.

Many respondents (19) reported that they breastfeed their children. A few respondents (5) could not breastfeed because of health conditions; one respondent did not breastfeed any of her children. The reason being that all her children were born prematurely, and she had high blood pressure. The two other respondents could not breastfeed one of their children because of medical reasons at the time after the birth of the child. One respondent also mentioned that she breastfed only one child because the other children did not like the breastmilk.

Duration of Breastfeeding

The length can affect the birth spacing and, therefore, the number of births/children one may have. 14 respondents said that they breastfed at least one of their children less than a year, while 17 breastfeed at least one of their children for more than one year; some respondents even breastfed for two years. There is no variation in the duration of breastfeeding between age groups that breastfeed less or more than a year.

“[I have breastfed] The second [child] four months.” (Nala, 30, Pentecostal, Secondary high)

"The girl [I've breastfed for] nine months and the boys until four months." (Fayola, 41, Pentecostal, Secondary low)

"Yes. My girl [I breastfed] until the fifth month because I was still going to school. So, she had [had breastmilk] for five months because she was with my in-laws. And my son up to now." (The son was one year old at the time of the interview) (Amina, 20, Pentecostal, Secondary low) "The girls were one year and three months, but the boy drank up to six months." (Feechi, 31, Pentecostal, High)

"I breastfed her for two years." (Nilla, 24, Pentecostal, Secondary high)

Reasons for Duration Breastfeeding

There were several reasons for the variation in the duration of breastfeeding. Some women breastfed their children for a short period because they had to start working or going to school after the postpartum period. Others found that the child sucked the breast too long, so they decided to prevent the child from continuing breastfeeding. Still, another mentioned that she was pregnant again and had to stop breastfeeding the current child. One respondent said that she did not have enough breastmilk because her breasts are small. Some respondents (6) ceased breastfeeding because the child did not want the breastmilk anymore. Some respondents (5) could not breastfeed because of medical reasons. Some respondents (6) said that they breastfed their children because it made the child healthy.

"My children did not like breastfeeding. Only one [child did]; the youngest girl. And my mother in law had said all their children are like that. So, maybe it comes from the father." (Lesedi, 44, Pentecostal, Secondary low)

"But with my last daughter, she only breastfed for 2- or 3-months, and afterward, she did not want anymore." (Arjana, 38, Pentecostal, Secondary high)

"No. the last one did not, because I had inflammation in my liver. So, I had to stop after three months or so. But I still wanted to give him, but they told me about liver things that you cannot give that child anymore." (Semira, 32, Traditional, Secondary low)

"When they were born, I could not give them breastmilk. The reason why? Because with seven months, instead of that, the blood pressure dropped, it was high [she had all her babies prematurely because her blood pressure was high when she was seven months pregnant], which made the children stay two weeks in the incubator. And before they came home, it [breastmilk] was scorched. We could not give them the breastmilk." (Tabia, 42, Roman Catholic, Primary) "And

my second daughter, I breastfed her for exactly eleven months because I had to work. Sometimes I was taken from work to go home to breastfeed her and then back to work. Then I thought no, it should stop." (Arjana, 38, Pentecostal, Secondary high)

"The one before the last one, I stopped her myself because she sucked me [i.e., breast] until I got bored. Nevertheless, I still gave the other baby breast, and still, she wants to suck [the breast]." (Semira, 32, Traditional, Secondary low)

"I still gave them so that they become strong." (Sheena, 55, Pentecostal, Primary)

Importance of Breastfeeding

The importance of breastfeeding explains why there is an excellent practice of breastfeeding among the respondents.

Respondents gave several reasons why they find breastfeeding essential. These reasons included: to strengthen the bond between mother and child (3 respondents); it is necessary for the health (13 respondents); and the development/intelligence of the child (3 respondents). One respondent said that breastfeeding is essential to feed the children. A few respondents (3) heard from someone that breastfeeding is good, so, therefore, it must be important.

"Ok, because of feeling. That feeling of motherhood, you know. Sometimes if you decide early that you do not want to breastfeed that child, you will already push away part of your motherhood. But if you say no, you give it to that child, then you keep it, let me say, the largest, the first part of motherhood, then you keep it. You also give the child warmth in this way. That child feels like I know my mother's scent. I know my mother's warmth. So that when he or she hears you walk by because sometimes they know those footsteps already or he knows this is my mother, you know." (Anaya, 24, Pentecostal, Secondary high)

"It also creates a bond between mother and child." (Zuri, 29, Pentecostal, High)

"I thought it was important. I learned that breastfeeding is important. Your child is getting smarter. Because of that, I actively breastfed. But afterward, I also felt that it was nice. So, I kept giving it. And every child has been breastfed for a year or more. Only when it starts to get difficult, do I stop." (Imena, 39, Roman Catholic, High)

"Because it has power. Everything you eat is in the breast, but the milk that they make is not so powerful [she meant milk-based formula]. But the breastmilk is good." (Sheena, 55, Pentecostal, Primary)

"Because I learned in school that it is important. The child grows better." (Morowa, 18, Roman Catholic, Secondary high)

"In breastfeeding, there are all the vitamins a baby needs to grow. That is why it is good to breastfeed a baby." (Femi, 19, Roman Catholic, Secondary high)

"I think it is important because you are taught that that's the best food for that child." (Falala, 26, Pentecostal, Secondary high)

The practice of breastfeeding is universal. There are widespread awareness and knowledge among all women, young and old. However, there are specific reasons for the termination of breastfeeding. The duration does not vary among young and old respondents.

Breastfeeding education

Respondents are informed about the benefits of breastfeeding. Breastfeeding education most likely affects their attitude and hence improves the practice of breastfeeding.

During the interviews, some respondents (7) talked about how they learned about the importance of breastfeeding, which is given by various sources, for instance, medical practitioners, the school, and the mother of the respondent. One respondent got the information from the internet. Respondents in young and old age groups are made aware of the importance of breastfeeding their children.

"With childbirth, you receive a baby book [from the hospital] with everything about breastfeeding, how to raise the child, how to feed the child." (Nilla, 24, Pentecostal, Secondary high)

"Because if you read on the internet, you can see that that is the most important thing for a child." (Hasani, 24, Moravian, Secondary high)

"And often when you take the child to the health clinic, then they also tell you to breastfeed your child." (Arjana, 38, Pentecostal, Secondary high)

"The doctor said it's good." (Fayola, 41, Pentecostal, Secondary low)

"My mother does not like canned food unless you have some milk. It will be taught to you the same day [they will teach you how to breastfeed, the same day that you gave birth]." (Zizi, 38, Roman Catholic, Secondary low)

Social learning/influence seems to support the practice and, as a result, has a positive impact on breastfeeding practices.

The practice of Postpartum abstinence

Practicing postpartum abstinence also inhibits fertility/reproductive outcomes.

All respondents that had children have abstained from sex after childbirth. Women mentioned that they bathe with hot water and herbal leaves during the period of postpartum abstinence (the section about postpartum rituals explains this further).

Duration of Postpartum sexual abstinence and rituals

A long or short period of postpartum practice can affect birth spacing. Respondents then are not exposed to the risk of becoming pregnant.

Most respondents (15) said that Maroons abstain for three months from sexual intercourse after childbirth. Some respondents (4) mentioned that with the first child, the postpartum abstinence is two months and two weeks. One respondent said that when a Maroon couple has a twin birth, the sexual abstinence is four months. Other respondents (5) indicated that the duration is more than three months; a few (2) even mentioned six months postpartum abstinence.

"Yes, the same period I bathe with water and so on [after childbirth, she practiced postpartum abstinence and other rituals such as bathing with herbs]. We bathe with water when we have the first child for two months and two weeks. And the second child three months, but we count in weeks. So, 12 weeks then it is three months for that child." (Sheena, 55, Pentecostal, Primary)
"Because there is still a wound there. Then you must bathe with "faja watra" [hot herbal water] up to three months." (Femi, 19, Roman Catholic, Secondary high)

"I think it is vital. Mostly, ok, it varies among different tribes with the Okanisi/Ndyukas. Sometimes it is for six weeks, sometimes for three months. It also goes with the kind of family because certain families let the woman bathe much longer with a steam bath. They say that your body loses its strength. You also must take steam baths, so that everything can shrink again." (Falala, 26, Pentecostal, Secondary high)

"A twin four months." (Kesia, 43, Pentecostal, Primary)

"I think it's important. It depends on whether the uterus is back in the right position where it was before. The older people say that after childbirth, the uterus must go back where it was before. Then you bathe with hot water, you drink 'bita.' After four months, then you can have sex with your husband again." (Neema, 45, Traditional, Primary)

"Sexual abstinence after birth differs for 3 or 6 months." (Maaza, 33, Pentecostal, High)

Women end of Postpartum Abstinence

The time when the respondent resume sexual activity reveals whether women adhere to the prescribed period of sexual abstinence after childbirth.

Nine women started being sexually active after three months; 8 resumed it at three months; 2 started in less than three months.

"Yes. Standard [it is required] because if your ancestors are Maroons, then they will say this you may do, and this you cannot do. And if you do that, these are the consequences. So, if you are afraid, you are not going to do it." (Wina, 29, Roman Catholic, Primary)

"My mother has taught me that you must do it again after three months. Yes, I have followed it." (Fayola, 41, Pentecostal, Secondary low)

"With my first [child], I should not lie because I was still young. I was 18 or 19. My husband waited until I was ready [it took months before she started again with sex]. The others [children], two months, and two weeks." (Lesedi, 44, Pentecostal, Secondary low)

"With my first child, it was eight months because the father was not there." (Zizi, 38, Roman Catholic, Secondary low)

"Four months and two weeks." (Nilla, 24, Pentecostal, Secondary high)

The practice of postpartum abstinence is universal. Culture restricts women from engaging in sexual intercourse after childbirth for three months. Women tend to stick to the practice as recommended by the culture.

Postpartum Rituals

There are other postpartum rituals besides breastfeeding and postpartum abstinence.

All respondents are knowledgeable about and practice the rituals Maroons perform during the postpartum period. Even respondents that do not have children yet know about these

traditions. Women have hot herbal baths for the whole body, and herbal steams for the vagina to tighten the vagina and shrink the uterus again.

Maroon women also drink a bitter liquid, called ‘bita.’ ‘Bita’ promotes good breastmilk, cleans the womb, and purifies the blood (Polimé, 2000; van Andel et al., 2008).

They tie their belly with a cloth to get it flat again. Maroons also use a ‘kamisa.’ The ‘kamisa’ is a cloth that is used as a sanitary napkin to prevent getting the cold. Some women said nowadays that they put a sanitary napkin on the “kamisa.” After some period, they bathe with cold water again slowly to let the body get accustomed to tap water. Most women get help from relatives during this period to perform these rituals. They abstain from sexual intercourse with their husbands/partners. Some relatives also stay with them at home to make sure that the couple does not have sex during the postpartum period.

“But usually it is like this. Maroon women, I do not know about other cultures when you have a baby, you must have steam baths for the first three months. Some women do it for two months and two weeks. You must have “faja watra” [hot water]. You must bathe and cleanse yourself with it, and usually, there is somebody with more experience who comes to help you, such as the mother. I also help people with it.” (Zuri, 29, Pentecostal, High)

Reasons for Practicing Postpartum abstinence and rituals

Reasons given by respondents give an understanding of why they maintain this tradition.

Respondents gave reasons for practicing postpartum abstinence. Most respondents said that the woman should recover after childbirth. Next, some said that you could get pregnant when you do not abstain from sex after birth. A few respondents indicated that the child would become sick or malnourished since one can quickly get pregnant again when not practicing postpartum abstinence. One respondent said that it is not hygienic to start with sex after childbirth. Some also mentioned that there are effects when not maintaining postpartum traditions: the woman can get a cold, or the child can get sick when the woman gets pregnant with another child.

A few respondents (3) mentioned that they abstained from sex because it affects the child’s well-being.

"Because you had that child, and after three months, you can have intercourse with your man again. It supposedly is because if you have sex with your man and you are breastfeeding your child, it is going to be sick, and you are going to get pregnant again. That's' why it's not right." (Binta, 18, Pentecostal, Primary)

"So, we do it, so the child is going to grow well, not malnourished, or not quickly get pregnant after that baby." (Nala, 30, Pentecostal, Secondary high)

"Because you must look after the child right. If you start when you have given birth, and you start early with sex, then you can get pregnant again. Because you are not allowed to take the pill, the child is young, and it can become sick." (Sheena, 55, Pentecostal, Primary)

Some respondents (4) reported that you could get pregnant if you do not abstain from sex after childbirth.

"Maybe you are going to have sex at that moment because you have those young people who do that when they are ready, let me say, after a month, then they have sex. And if you are fertile quickly, you are going to get pregnant again." (Amina, 20, Pentecostal, Secondary low)

Many respondents (23) believed that a woman should recover after childbirth, hence the sexual abstinence and postpartum rituals.

"After childbirth, you are going to bleed. The vagina is stretched ten centimeters so that the child can come out. And for recovery, we bathe with hot water and leaves. The recovery period is sometimes three months, and sometimes with the first birth, it is for two months and two weeks. It depends if it is a boy or a girl. You have a recovery period so that the vagina can recover properly again. If your uterus is not right where it should sit, it will sit well again. It will also restore your body." (Nilla, 24, Pentecostal, Secondary high)

"You take steam baths for three months to get your uterus in the former state and prepare yourself for another child." (Morowa, 18, Roman Catholic, Secondary high)

"It's preserving your body." (Semira, 32, Traditional, Secondary low)

Some respondents (4) stated that there are consequences/effects of not abstaining from sex after childbirth or for not doing the postpartum rituals.

Maroons believe puerperal women are susceptible to catching a cold or 'koo kisi en.' They, therefore, have rituals to prevent this. Maroon women use hot herbal steam baths and a 'kamisa.' Maroons say that one of the most critical parts of the body, where the cold

can penetrate, is the vagina. They wear the ‘kamisa’ (a cloth used as a sanitary napkin) to prevent the cold from penetrating through the genitals. Some respondents use a sanitary napkin on the ‘kamisa’ nowadays. The hot herbal baths keep the body warm (Polimé, 2000; van Andel et al., 2008). Catching a cold is seen as a disease that is caused by remnants of dirty blood in the womb that can lead to severe abdominal pain, high fever, and even death (van Andel et al., 2008). Symptoms of cold catching are slimming, pale appearance, stomach complaints, and fluid that occurs in sexual contact (Polimé, 2000).

“Then we Okanisi/Ndyuka say “koo kisi,” you’re going to be watery. Then it is not good.” (Lesedi, 44, Pentecostal, Secondary low)

“I am going to say in Maroon “koo kisi,” you're going to catch a cold. Because then your belly can get big and those kinds of things.” (Zuri, 29, Pentecostal, High)

“It is good for yourself because if you have sex after the birth of the child, you are going to feel it later. So, you must wait a specific time.” (Desta, 45, Roman Catholic, Secondary low)

“Because if you breastfeed the child and you get pregnant again, then that child is not healthy because then he gets diarrhea.” (Zizi, 38, Roman Catholic, Secondary low)

One respondent said that it is not hygienic to start with sex after childbirth.

“It is not hygienic either. We also got it from the midwife. They say that you can wait for up to six weeks, after birth you can start again. But for us, it is after three months.” (Feechi, 31, Pentecostal, High)

Cultural beliefs influence the preservation of the practice of sexual abstinence and rituals after childbirth. There are consequences for the infant and the mother. Maintaining these practices helps to avoid another pregnancy, recovery of the puerperal woman, mainly the uterus and vagina, prevent illness of the infant and mother.

Family’s View Postpartum Abstinence and rituals

Attitudes of others like the family also may influence them to adhere to this tradition.

Respondents often mentioned the involvement of family so that they adhere to the sexual abstinence for these three months. Either the mother or other relative comes to stay with

them, or they go live with the mother of the respondent for that period. Alternatively, men who work elsewhere in the interior may leave home for some period. Some men first help their wives in the first month of childbirth and then go for work in the interior. These measures prevent the respondent and partner from having sex before the postpartum abstinence period is over.

When asked about what their family thinks about abstaining from sexual intercourse after childbirth, the responses differ. Many respondents (10) mentioned that their family finds it right for reasons such as that their mothers taught them to do so, or if they do not do that, the family is going to make negative remarks about it. Many respondents (10) also indicated that it is tradition to practice postpartum abstinence. Some respondents (5) explained that abstinence is practiced for health reasons. Some (5) respondents also mentioned that the family has some sort of involvement during the period of postpartum abstinence. Maroon women get help from relatives to do postpartum rituals. Sometimes a family member stays at home with them to make sure that there is no sexual encounter during this period. One respondent said that the family taught her about the chance of getting pregnant when she 'sleeps' with the man after childbirth. One respondent noted that the family does not talk about this.

"It is a tradition. It is a standard tradition. All Maroons know about it after the childbirth, you rest. The woman rests for three months. After childbirth three months and then sex." (Wina, 29, Roman Catholic, Primary)

Yes. It has started somewhere with the ancestors until my generation they have adjusted it. So, they certainly think it is essential, yes." (Falala, 26, Pentecostal, Secondary high)

"It is the same with them because they encourage you that you should not have sex. You should not do anything. You are not going to be good anymore. Because they find if you have sex too early, the chances are high that "koo kisi." My mother says, "te koo ei kis joe," they get it off with pepper. And my mother usually says when you've gotten older up to there you get those problems." (Lesedi, 44, Pentecostal, Secondary low)

"They [the family] also find it good because they come to sleep with you so that it does not happen because there are some men who bother you [asking for sex]." (Desta, 45, Roman Catholic, Secondary low)

"My family also because your parents are watching." (Zizi, 38, Roman Catholic, Secondary low)

Your family teaches you that after the birth of a child, you cannot 'sleep' with a man. Otherwise, the man can get you pregnant again. Then you have two babies." (Kesia, 43, Pentecostal, Primary)

Postpartum abstinence and rituals are cultural practices. The family's involvement influences adherence to these customs. The family safeguards the observance of the postpartum abstinence and assists with the reproductive rituals like the herbal baths.

Husband's View Postpartum Abstinence

The attitude of the partner concerning postpartum abstinence may also help the respondent to observe abstaining from sex after childbirth for the prescribed period.

Most respondents (22) reported that their husbands/partners agree with sexual abstinence after childbirth. Many respondents (12) mentioned that Maroon men know that this is part of their culture. A few respondents (3) gave other reasons such as that the partner does not determine or thinks that when she does not want to have sex after childbirth (because for four months she abstained from sex) that she had someone else.

"He does not think it is a bad thing. He thinks it is good. I tell him that he should leave [not stay at home], because for me, after I gave birth, I want more sex. So, you long for the man. So, I tell him to stay at home with his parents or whatever. Ok, he comes to visit, he comes to sleep, but with us Maroons when you gave birth, you cannot 'sleep' with a man right away because then you are not going to put your baby between us. Why? I do not know." (Amina, 20, Pentecostal, Secondary low)

"It was not difficult because my husband is not often at home. Then when I gave birth, he helps me up to one month, three weeks, then he goes away." (Lesedi, 44, Pentecostal, Secondary low) "He knows that the culture of his people is like that. Today the woman has given birth, and after some months, you have sex with the woman. Then he is patient, or he goes working for three months. In the fourth month, then he comes back to you." (Neema, 45, Traditional, Primary) "He finds it good because you must bathe "faja watra" [literally, i.e., hot water] for your body to become normal as before. So, it is normal. Let`s say it is normal in our culture. Thus, the man himself knows that it is normal in our culture. He must wait. He must be patient. They will do their thing, but at home, he must be patient." (Semira, 32, Traditional, Secondary low)

"He thinks maybe I have someone else, but then I explained to him how it is." (Binta, 18, Pentecostal, Primary)

“He does not determine it. I decide it.” (Hasani, 24, Moravian, Secondary high)

“Every Maroon boy believes in that. They learn it from their mother.” (Morowa, 18, Roman Catholic, Secondary high)

Husbands/partners consent with the practice since it is part of the culture. Husbands’ cooperation helps them to keep the tradition.

Summary of postpartum practices

Postpartum practices affect fertility. Respondents practice breastfeeding, postpartum abstinence, and other postpartum rituals.

Breastfeeding and postpartum sexual abstinence are universal among the interviewees. Child spacing is a result of postpartum practices, which has an impact on fertility.

Respondents mentioned various reasons that may give an understanding of the difference in the duration of breastfeeding. Some women stopped breastfeeding after less than a year, while others continued breastfeeding the child for longer than a year. Few respondents who stopped breastfeeding explained that they had to return to work or school. Few respondents found that if the child sucked the breast too long, therefore, they stopped breastfeeding. Another was pregnant, and one said that she did not have enough breastmilk because her breasts are small. Some respondents could not breastfeed because of some medical reasons or health issues; nipple got a wound, liver inflammation, infected by SARS, babies in an incubator, and blood pressure of the mother. A few respondents had to take medicine and were advised not to breastfeed the child since it would have consequences for the health of the child. Other respondents stopped breastfeeding because the child did not want the breastmilk anymore.

Other respondents said that they breastfeed their children because it made the child healthy.

Despite the difference in the duration of breastfeeding, most respondents believe that breastfeeding is essential. These reasons included to strengthen the bond between mother and child, and it is necessary for the health and the development/intelligence of the child. One respondent said that breastfeeding is essential to feed the children. A few respondents heard from other persons that breastfeeding is good, so, therefore, it is crucial.

Maroon women receive information about the importance of breastfeeding from various sources such as medical practitioners, the school, through the internet, and the mothers

or families of the respondents. This form of awareness most likely contributes to motivating respondents in young and older age groups to practice breastfeeding.

Another postpartum practice is sexual abstinence for at least three months after birth. A few mentioned even six months. Some respondents pointed out that the period is shorter for the first child; this is two months and two weeks. For multiple births, the duration is longer; this is four months. A few also said that there is also a different period when a woman has a girl child or a boy child. The duration of abstinence is longer when a woman has a male child. They could not tell what the reason is for this difference in length. All respondents adhered to these traditions. Most resumed sexual activity at or after three months, while a few started at two or two and a half months.

Respondents adhere to postpartum sexual abstinence practices for several reasons. Women should recover after childbirth, the possibility of getting pregnant, belief that children would become sick or malnourished since one got pregnant quickly, it is not hygienic to start with sex after childbirth. Some also mentioned that there are effects when not maintaining postpartum traditions: the woman can get a cold, or the child can get sick when the woman gets pregnant with another child, and it affects the child's well-being.

The social environment also seems to support respondents for maintaining the practice. Most Maroon men agree to abstain from sexual intercourse after birth since mainly because it is part of the culture. Families also agree and are often involved in keeping tradition. The mother or other relative stays with the respondent. It is also possible that the respondent goes to live with her mother for that period. Some men who work elsewhere in the interior may leave home for this period. These men first help their wives/partners in the first month of childbirth and then go for work in the interior. The man's absence helps to adhere to the postpartum abstinence period. Families of the respondents find it right to maintain the postpartum abstinence for reasons such as that their mothers taught them to do so, or if they do not do that, the family is going to make remarks about it. Many respondents also indicated that it is tradition to practice postpartum abstinence. Some explained that they practice postpartum abstinence for health reasons. Others mentioned that the family has some involvement during the period

of postpartum abstinence. Maroon women get help from relatives to do the postpartum rituals after childbirth. Sometimes, a family member lives at home with them to make sure that there is no sexual encounter during this period. One respondent said that the family taught her about the chance of getting pregnant when she ‘sleeps’ with the man after childbirth. One respondent noted that her family does not talk about this. Not talking about these rituals may lead to the gradual disappearance of this tradition if more families do not transfer this knowledge.

All respondents are knowledgeable about and practice the rituals Maroons perform during the postpartum period. Even respondents that do not have children yet know about these traditions. Women have hot herbal baths for the whole body, and herbal steams for the vagina to tighten the vagina and shrink the uterus again, drink bitter liquid; this also helps the breastmilk. They tie their belly with a cloth to get it flat again. They also use “kamisa.” The ‘kamisa’ is a cloth that is used as a sanitary napkin to prevent getting the cold. Some women said nowadays that they put a sanitary napkin on the “kamisa.” After some period, they bathe with tap water again slowly to let the body get accustomed to tap water. Most women get help from relatives during this period to perform these rituals. They abstain from sexual intercourse with their husbands/partners for a maximum of three months. Some relatives also stay with them at home to make sure that the couple does not have sex.

5. DISCUSSION

The purpose of the research was to identify fertility change in the Maroon population and to examine the factors that can indicate if those living in the urban area in Suriname are undergoing a process of demographic transition.

This chapter includes a discussion of the significant findings in context to the fertility behavior and contraceptive use of Maroon women as related to the existing knowledge/literature and implications for the theory about the subject. The discussion will help answer the research questions and hypotheses mentioned in Chapter1, Section 1.7. The chapter concludes with the limitations of the study and a summary.

The findings of the qualitative research help to understand (1) why the TFR is relatively high compared to other ethnic groups, (2) the change in the TFR of the Maroons. These statements or explanations only concern-as said- this group of respondents in the urban region of Suriname.

5.1 Interpretation of the findings

This section will discuss whether the study findings and the interpretation of their significance to answer the research questions and support the hypotheses of the study.

Each section is related to the research question or hypothesis.

5.1.1 Fertility level of Maroon women

Fertility changes have occurred in Suriname between 2010 and 2018 among the main ethnic groups. The Maroon population had the most significant decrease in their TFR (23 percent), indicating a process of fertility transition as described in the literature, where, among some authors, Coale (1984) sustains that once fertility drops to 10 percent, the fertility transition has begun. Factors such as urbanization, labor force participation, and increased schooling that encourage people to adjust their family sizes have contributed to this process. Having established in the conceptual framework that the transition is a result of social and economic changes, such a relationship is discussed in the following sections.

Despite the changes, Maroon women still have the highest level, relative to the other ethnic groups.

5.1.2 Urbanization, increased schooling, and labor force participation

This study focuses on Maroon women living in the urban region, specifically Paramaribo and Wanica. Globally, urbanization has created opportunities for people to attain education, participating in the labor force, improving health, and, thus, improvement of one's lifestyle. Hence, these factors may influence the lifestyle of the Maroon woman residing in these urban areas and can give explanations for understanding their fertility transition. The study findings and relevant literature show that Maroon women living in the urban region of Suriname have achieved an improvement in their educational attainment. The literature confirms that some main motives for the urbanization of the

Maroons were education and employment (Amoksi, 2009; Goossens, 2007; Koole, 2010; Vernon, 2009; Vernon, 2019; van Stripriaan, 2009). These motives resulted in educational attainment and labor force participation of Maroons, specifically women (Amoksi, 2009; Prijor, 2018; Vernon, 2009; Vernon, 2019).

Improving one's educational level and labor force status may also bring about changes in other areas of one's lifestyle. These areas include one's sexual and reproductive behavior, union formation behavior, and contraceptive behavior.

The study findings reflect a few changes, specifically among adolescent Maroon women. They increased their educational levels that show a corresponding increase in age at first sexual activity, and declining union formation. These changes lead to a rising age at first marriage or union. Adolescent women also experienced a delay in childbearing, indicating declining teenage pregnancies. Thus, also contributing to declining fertility. The findings of the qualitative study show that many of the respondents who did not have children were young and still in school. The occurrence of respondents who yet do not have children and are attending school could indicate an increase in childbearing age. Not having children or delaying childbearing contributes to the decline in fertility rates. Most of these changes correspond with the demographic features related to the first and second demographic transition, as mentioned by Lesthaeghe (2014): declining fertility, rising age at first marriage, fall in the proportion married. Another feature of the transition is fertility postponement, thus leading to a rise of the age at childbearing. The literature indicates that the improvement in educational level resulted in an increase of age at marriage and a decrease in the number of children (Amoksi, 2009; Prijor, 2018).

However, there is a difference in the demographic behavior of Maroon women compared to the demographic transition. First, regarding sexual behavior, the age at first sexual activity among young adult Maroon women has increased. During the demographic transition, the age at first marriage increased, but that does not mean that likewise, the age at first sexual activity had increased. The changes during the second demographic transition show that sexual intercourse is not linked anymore with marriage/marital fertility. Lesthaeghe (1991) mentioned that premarital sex increased throughout the 1960s, and

age at first sexual activity declined. Secondly, Maroon women generally have a fertility level above replacement. Still, they are experiencing some demographic characteristics that occurred during the 1960s and upward in Europe with below-replacement fertility levels, such as increased age at first marriage, decreases in fertility levels, fewer births, improvements in educational attainments, and increases in labor force participation.

Urban versus rural fertility

The study findings show that urban Maroon women have lower fertility rates compared to their rural counterparts and the overall fertility level of Maroons. However, the urban fertility level remained stable and is still above replacement level. The stability in the fertility level indicates no changes concerning fertility outcomes among urban Maroon women, despite the overall socio-demographic changes during 2010 and 2018. Rural fertility is changing and is accompanied by changes in the union and contraceptive behaviors of rural Maroon women.

On the other hand, the overall fertility rate of the Maroons has declined based on the decrease in rural coastal and rural interior areas in Suriname.

The literature supports the hypothesis that factors such as urbanization and education lead to a decline in fertility. Fertility decline starts in urban areas first. Coale (1984), Easterlin (1985), and Nag et al. (1985) support this. Urban areas have features that motivate people to desire small families. Maroon fertility declined, but it remains relatively high-above replacement level- and stable in the urban areas. The decline can be explained by changes in socio-demographic behavior among young Maroon women, a rise in contraception among the middle age groups, and the fertility decline in specifically the rural areas. The stable fertility level also shows that the urban area had experienced its fertility transition already.

5.1.3 Factors present before the Demographic transition

Information about the demographic development of Maroons is scarce. However, few pieces of literature give insight that various relationship forms, early marriage, polygyny, divorce, multiple remarriages, and independence existed in early Maroon societies.

Contrary to the demographic transitions, Maroons knew different relationship forms and marital arrangements during the 17th to 19th centuries. Maroons had polygynous, and separate living of couples. Literature showed that Maroon men had multiple wives. Women most likely were also not monogamous. Couples were not residing in the same households because of their traditions. So, Maroons did not have a nuclear family model as Western societies. This population also had low ages marriage and thus early sexual activity (van Eyk, 1830). Permanent celibacy was also not an option (de Beet and Sterman, 1981).

1) Relationship forms and living arrangements

Literature shows that a Maroon couple used to live separately. Even though Hurault (1959) called the union “cohabitation,” couples were not living together in the same household. The man and the woman each lived in the village of their maternal kin. Occasionally the man lived with the woman, and he had to provide her with goods and clear the horticultural plot. Most recent literature also reveals that Maroons still live separately from their partners (Terborg, 1999). Menig (2008) mentioned that according to tradition, a person resides in the mother’s village because of the kinship system.

Literature also shows that Maroons had brief and multiple relationships (Hoogbergen,1992/2015).

In European countries where the transition took place earlier, we see that an increase in this form of cohabitation only occurred later. Lestheaghe (2014) mentioned that during the first demographic transition, there was low/declining cohabitation. The second demographic transition showed changes in union formation such as pre and post-marital cohabitations, LAT (Living Apart Together) relationships (Lestheaghe, 2010; Lesthaeghe,

2014; van de Kaa, 2008; Sobotka, 2008; Zaidi and Morgan, 2017). Polygynous relationships and couples living separately were common among Maroons in early societies. Maroon women most likely had children with different men implying that they had different relationships in their lives (Hoogbergen, 1992/2015). Currently, Maroon couples also live separately, although there are recent changes in living forms, such as the modern nuclear family model (Terborg, 1999).

2) Polygyny

Another cultural institution within the social organization of the Maroon society is polygyny. This relationship form shows that men could have multiple wives at a time.

The literature confirms that Maroon societies have practiced polygyny since the early establishment (van Eyk, 1830; de Groot, 1983; Hoogbergen, 1992/2015; Hoogbergen and de Theye, 1986; R. Price, 1973; S. Price, 1984/1996). The literature of recent dates confirms that polygyny still exists in Maroon societies (Adams, 2003; de Beet and Sterman, 1981; Helman, 1977; Terborg, 1999). Polimé (2000) stated that Maroon men in polygynous marriages could have other relationships besides their wives.

The current study findings show that, even if Maroons still practice polygyny, a declining trend regarding it is observable in Maroon society. The decrease may suggest that women do not accept a polygynous relationship anymore. Another possible explanation could be that Maroon men do not choose to be in a polygynous marriage because of economic circumstances (Malmberg-Guicherit, 2001). Not having a polygynous marriage does not mean that men do not have multiple partners. Even if men are not in a polygynous marriage, it is still possible that they have (a) casual partner (s) (Terborg, 1999).

The literature supports the study findings regarding the changes in the practice among Maroon tribes. Not all Maroon communities practice polygyny nowadays. One of the factors that influence this cultural institution is Christianity (Adams, 2003; Amoksi, 2009; de Beet and Sterman, 1981; Menig, 2009).

The literature also points out that there are Maroon men who practice monogamy (S. Price, 1984/1996). Maroon society expects women to be monogamous (Helman, 1977; Terborg, 1999; Vernon, 2009). However, Hoogbergen (1992/2015) declared that during the slavery period, Maroon women probably were not monogamous.

The study's results emphasized that polygyny is subject to certain conditions. The practice occurs under conditions that the man treats the wives equally and must be able to take care financially of the needs of all wives.

Some authors explain that polygyny gives social status but is also subject to social and economic obligations (de Groot, 1983; Helman, 1977; S. Price, 1984/1996; van Wetering, 1966).

Polygyny may partly motivate the demand for children and thus resulting in high fertility. In comparison, literature does not mention the existence and acceptance of such a union in historical and modern Europe.

3) Divorce

The literature suggests that, historically, Maroon women could divorce their husbands (Hurault, 1959; Kahn, 1929). Unions were not stable, and multiple remarriages occurred among Boni women (Hurault).

Documentation from later dates also aligns with earlier literature that Maroon women can initiate divorce (R. Price, 1974). The current study supports the literature about Maroon women able to divorce their husbands.

Literature also indicates the occurrence of frequent and high divorce and remarriages (Green, 1974; Helman, 1977; R. Price, 1974; S. Price, 1984/1996). Despite prevalent divorce and remarriage, some couples stayed their entire life together (De Beet and Sterman, 1981; S. Price, 1984/1996). During the first demographic transitions, divorce rates were low, whereas remarriage after widowhood or divorce was high (Lesthaeghe,

2014). Thus, the remarriage came from low divorce rates. Maroons had a high divorce and multiple remarriages of women specifically.

On the other hand, there was a rise in divorce rates and a decline in remarriage rates during the second demographic transition (Lesthaeghe, 2014). Instead of remarriages, post-marital cohabitation and LAT relationships increased in the European countries. Maroon women had remarriages at multiple times, and “living apart” arrangements although traditionally or polygynous married. A Maroon adult cannot remain single their entire life or for long periods. Consequently, remarriage is encouraged. Menig (2008) revealed that a person must remarry after a divorce or death of a partner after the mourning period. An adult must have a partner in life. De Beet and Sterman (1981) found that permanent celibacy is not a choice. S. Price (1984/1996) said that women do not remain unmarried for long.

The literature and the study findings can give a deeper understanding of the marriage obligations and the divorce process of Maroons. The duties of the marriage among the Maroons, as mentioned in the literature, suggest that both partners may divorce if one does not stick to the marriage commitments (Menig, 2008; Vernon, 2009). Vernon also said that the couple could live separately or together. In any case, the man is “entitled to a life of his own.” The woman must be obedient and faithful to her husband. For Matawai, Saamaka, and Ndyuka, the families observe that the marriage rules are maintained, according to Vernon (2009).

Maroon women may easily divorce their husbands. The literature of past centuries showed that Maroon women could divorce with no reason (Kahn, 1929; Hurault, 1959). Recent literature, however, indicates that there are grounds for divorce. Thus, literature helps understand why the respondents in the current study mentioned reasons for divorce, such as if the husband does not take care of the woman anymore or beats her. The study results also indicate that there are certain conditions for divorce. The terms of divorce explain under which requirements a separation may occur. These reasons for

divorce are stated in the marriage obligations, as mentioned by Menig (2008). The husband cannot use physical violence, and he is obligated to take care of his family.

On the other hand, divorce can also occur based on the adultery of the man (Green, 1974; Terborg, 1999). However, Helman (1977) reveals that the man is not obligated to be faithful. It is the woman who must remain faithful.

The results of the study align with the literature that there are institutions in place trying to prevent a divorce. The family attempts to reconcile couples and permits divorce if it is necessary or may advise when to divorce. The partners must adhere to a separation period. Also, the church is involved in counseling couples (de Beet and Sterman, 1981).

The literature shows that both men and women may divorce, but that divorce is stricter for the woman. Helman (1977), R. Price (1974), and Vernon (2009) mentioned that the woman must remain single for a year after the divorce. On the contrary, the man can marry immediately (Helman, 1977). The study findings also reveal that the individuals involved, observe a separation period. This separation period gives them a chance if they want to reconcile. However, there is a difference in the results of the study and literature. Respondents in the study talk about a separation period of three months. In contrast, the authors, as mentioned earlier, noted a separation period of one year. This difference in period means that there is a change in the custom.

However, the frequent divorce did not end up in time loss of fertility. According to de Beet and Sterman (1981), divorce did not result in a time loss within the reproductive period because Matawai women had another partner quickly after divorce.

4) Fertility

Maroons also have experienced a different fertility pattern compared to what the demographic transition phases prescribe. Some Maroon societies experienced low increase-decline-increase fertility levels, whereas European countries have experienced high-low-below replacement fertility levels. Literature shows that in the early establishments of the various Maroon societies, there existed an extreme shortage of

women during the 17th and 18th centuries. Therefore, the available marriage partners were small, which must have affected reproduction. Thus, fertility was low. Data shown in Hurault's (1959) study indicates that Maroons had high fertility later, during 1850-1895.

De Beet and Sterman (1981), and Hurault mentioned that some societies, Boni and Matawai, experienced fertility declines. Hurault and De Beet and Sterman also reported a significant number of childless women that have contributed to the decline in fertility. The reason for being childless was not because women deliberately decided not to have children, but because of epidemiological factors.

Another aspect of the fertility pattern of Maroons was that women had births from different relationships (Hoogbergen, 1996/2015). Thus, fertility did not take place in a monogamous marriage like Europe.

Furthermore, children also grew up being raised by a single parent. Hoogbergen (1996/2015), and S. Price (1984/1996) said that Maroon women raise their children by themselves. Hoogbergen also mentioned that the children received the name of the mother. Thus, "single" motherhood was common since their early establishment and later centuries (Price, S, 1984/1996). European countries experienced a rise in single parenthood during the second demographic transition.

Maroons' fertility intentions were driven by cultural institutions, such as the matrilineal system, and polygyny. Hoogbergen and later S. Price said girls and women were essential for producing children for the survival of the clan. Thus, Maroons had institutions that encouraged fertility during the 17th and 18th centuries.

Compared to Europe, Coale (1984) argued that in the 18th century, Western Europe had moderate fertility rates from four to five and a half because of measures such as late marriages and permanent celibacy.

5) Independence of Maroon woman

The literature indicates that Maroon women are independent in some aspects of life Amoksi, 2011; S. Price, 1984/1996). Maroon women are the provider of food and

contribute, therefore, to the family's livelihood. Furthermore, Maroon women live in their own houses, showing the occurrence of female-headed households, although resulting from the tradition that husband and wife live separately. The presence of "female-headed" households and "LAT" marriages among Maroons should not be seen as the female headed households and visiting or LAT relationships from a western point of view. These living arrangements occur mainly because of the tradition that lets couples live separately.

Maroon women had the care and authority over their children in the 18th century, and gave them their names (de Groot, 1984; Hoogbergen, 1992/2015; S. Price, 1984/1996). Thus, one aspect of the independence of Maroon women during the 17th – 19th centuries was that they could raise their children by themselves and give them their names.

In the 18th century, Maroon women also could leave their husbands whenever they wanted (de Groot, 1984).

Women's place in the family and the matrilineal system is essential. The literature shows that a Maroon woman is the founder of the family and ancestor of the clan (Amoksie, 2009; Pakosie, 2003).

Another aspect that the literature mentioned is the decision-making role of the Maroon woman in the political institution of Maroon society (Amoksi, 2011; Pakosie, 2003).

On the other hand, there is material dependence. The husband provides economic support (Helman, 1977; S. Price, 1984/1996). According to the tradition of the Maroon society, the man is responsible for taking care of his family (Amoksi, 2011; Menig, 2008). Amoksi explained that if the woman must take care of things, the man is referred to as a no-good man. The current study findings support the literature about the economic support of the man. However, the study findings and recent literature show that female financial autonomy is taking place.

In a marital union, the man can restrict the wife in her movements, despite their educational levels (S. Price (1984/1996; Terborg, 1999; Vernon (2019). Other literature indicates that educated women can make decisions together with their partners, although they are still responsible for taking care of the children and the household (Prijor, 2018).

In line with the hypothesis, the literature suggests that certain factors linked to the process of demographic transition were already present among Maroon women before such a process began. The possibility of high and frequent divorce, several relationship forms, multiple remarriages, raising, and taking care of their children as single parents, are factors. The woman also occupied an essential place within the Maroon societies as the founder of the family, ancestor of the lineage, carrier of the culture, and advisor in decision making concerning the society.

Despite independence in certain areas, women were also materially and economically dependent on their husbands, and that the husband may control their social lives. Maroon men are culturally considered responsible for specific tasks, while the woman has other responsibilities or roles.

However, Maroon women are now making changes in their material dependence on men. There are also changes in which restrictions in the relationship imposed by the man are now reduced.

5.1.4 Sexual and Reproductive behavior

The TFR of the Maroons declined in 2018 but remained high as opposed to other ethnic groups in Suriname. Maintaining this relatively high fertility rate may lie in their reproductive attitudes and values.

1) Sexual behavior

Age at first sexual activity

The findings of this study, compared with the literature, reveals that there is a change in the age of the first sexual experience of Maroon women. The literature indicates that Maroon women started earlier compared to women of other ethnic groups (Adams, 2003; Jagdeo, 1993). The current study findings show the opposite. Maroon women are becoming sexually active later than they did before. The rise in the age of sexual activity

results in later childbearing. On the other hand, the current results indicate that women of other ethnic groups begin earlier with sexual activity than the Maroon women.

Partner choice

Older literature shows that Maroon women could select their partners (Kahn, 1929).

The current study agrees with the literature about the choice of a partner that Maroon women are free to choose a partner. Overall, the women in the study can select their partners. The study findings also disclose that the role of the family in the partner choice is minimal. But family's approval is still necessary because of the family's involvement in traditional marriage ceremonies and divorce (Green, 1974; Leckie and Buunk, 2017; Menig, 2008). The latter adds that if there is disagreement concerning the child's partner choice, the family will try to reach a consensus. She also reveals that if things go wrong in the relationship, one expects the family's protection.

Rite of passage to adult age

Another important ceremony is the rite of passage, which grants adult status to girls and boys. After this rite of passage to adult age, the Maroons can marry and have children (De Beet and Sterman, 1978; Polimé, 2000). Consequently, sexual activity may start. The results of the study reveal that some respondents have experienced the rites of passage to adult age. Amokis (2009), Polimé (2000), and Saaki (2018) showed differences in the practice in the interior and urban areas. Rural Maroon women experience this ritual at a younger age, compared to their urban counterparts. Amoksi (2009) said that girls get it at a much older age because of education. Hence, the impact on fertility because the earlier one begins, the longer the period of exposure to pregnancy or reproduction.

The study findings indicate that many respondents have unintended pregnancies before using a contraceptive method. Literature shows that Maroons also accept unwanted pregnancies (Polimé, 2000; Saaki, 2018). If unwanted or unintended pregnancies are welcome than it also has an impact on fertility.

Marriage

Although Maroon women may marry after the rites of passage to adult ages, the current study findings reveal that there are changes concerning the union or marital status, because of young Maroon women who delay their entrance into marriage or union. Women are at risk of being pregnant when they are in a stable union. Thus, young women and adolescents are postponing the risk of becoming pregnant and having a live birth. The literature shows that Maroon women got married in the adolescent period in the past (Adams, 2003; S. Price, 1984/1996).

Marriage and other unions are an essential factor in affecting fertility because of the exposure to pregnancy. The literature shows that Maroons do not encourage long periods of singleness since a single person must remarry soon after divorce or death of the partner (Menig, 2008). The duration of one's marital status has an impact on fertility also.

The study findings show that most respondents in the study are not married traditionally or legally. As a result, this may increase cohabitation. Therefore, reproduction occurs in this union, being also a feature of the demographic transition. Thus, Maroon reproduction is not confined within marriage.

The literature also confirms cohabitation as a living arrangement among Ndyuka couples. Vernon (2009) mentioned that Ndyuka know beside marriage also cohabitation as in a western standard. There are also changes in marriage customs in precisely the Saamaka society; the traditional marriage is complemented with other customs. Menig (2008) stated that in Saamaka villages, Christian Maroons might keep their traditions, although adapted, combined with Christian beliefs, or they may choose a western wedding. Western Christianity makes it possible to incorporate traditions. Westernization does not have to eradicate traditions and rituals.

2) Reproductive behavior

Importance of children

The study findings reveal that Maroons attach value to children. Data make known that by the end of their reproductive lives, almost all Maroon women have children.

Some beliefs and customs show how Maroons value fertility, which commences from their belief that childbearing cannot be stopped because children are in the womb before the woman is impregnated (Terborg, 1999), and continues after childbirth. Polimé (2000) and S. Price (1984/1996) reveal that customs and rituals should result in a successful pregnancy outcome. The study findings indicate that even after childbirth, herbal drinks are used to stimulate good breastmilk to feed the infant. Also, there is the belief that the infant should get breastmilk to avoid undernourishment, and until it is physically strong (Adams, 2003). The results confirm the universality of breastfeeding practices.

Beliefs and customs have an impact on the behavior of a person, and as such, beliefs and traditions related to fertility affect the reproductive behavior of the Maroons.

Desire for children

The economic and social values of children are expressed in providing insurance and security at old age, support, offspring, companionship, prestige, and social status. The study's findings imply that respondents of all ages have a wish for children. Children are not a burden, but these women want to be able to take care of them. Adams (2003) indicated similar reasons why Saamaka Maroon women wanted children.

The literature also confirms the value of children in Maroon society. There are various reasons why children are essential. Children have economic value because they guarantee care for the old age and help their mothers from a young age (de Beet and Sterman, 1978; Goede, 2011; Green, 1974; S. Price, 1984/1996). Children are also company for women (de Beet and Sterman, 1978; S. Price, 1984/1996).

On the other hand, the study findings reveal that some circumstances prevent them from having more children. Economic or financial and health conditions can prevent women from having the desired number of children. The desire for wanting (more) children exist, but circumstances influence reproductive decisions resulting in declining demands for children and, thus, affecting fertility level negatively.

Child preference

Sex preference may affect fertility. The results of the study show that respondents do prefer a sex mix. Motivational reasons for having children might increase the demand for children. Each child has a specific place in Maroon society that makes them essential. Respondents want children for gender-specific reasons.

Women are essential to produce offspring and to carry on the culture. Hoogbergen (1992/2015) and S. Price (1984/1996) also mentioned that. On the other hand, men mainly have an authoritative role in family affairs, religious rituals, and as leaders of the tribes.

Both boys and girls help their mothers but in different ways. Respondents expect their daughters to support their mothers during days of sickness. Moreover, sons are expected to take care financially of their mothers.

The literature reports similar reasons for having male and female children. Adams (2003) mentioned that girls make the family larger and help with domestic chores. Boys expand the family of the wife and take care financially of their mothers. Boys also help to clear the horticultural plot. Men lead and have authority over their sisters' children. Men are also needed for significant events.

The social environment of fertility

The study findings and literature show that institutions and social environments encourage women to have children. The attitudes of families, husbands, culture, and religion regarding children are positive. Thus, women in the study are in a social environment that positively impacts their fertility preferences and values. This form of social and family pressure may or may not influence these women's reproductive goals and affect the number of children a woman has.

Women's reasons for having children are consistent with those of men and families. Families and husbands of the respondents want children for purposes such as offspring, reproduction, social security, value and wealth, social status. The literature indicates why

women are encouraged to have children. Reproduction, and continuity of the lineage, are essential aspects of Maroon culture (Koole, 2010; S. Price, 1984/1996). S. Price stated that the woman maintains her influence as an ancestor when she dies. The literature also shows that women and men who have many children have status. Terborg (2000) noted that the number of children gives men social status, while Goede (2011) indicated that Maroon women gain prestige from other Maroon women when they have more children.

5.1.4.1 Decision-making concerning sexual and reproductive behavior

The study findings and literature show who makes informed decisions regarding reproduction, contraceptive use, partner choice, and sexual relations. All these aspects concern the reproductive life of Maroon women. There are cases where the woman can decide, the couple chooses together (joint decision making), or the husband makes the decisions (coercive or unilateral decision making)[47]. Women deciding on their own can also be based on a unilateral decision, therefore not only pointing towards female autonomy. Contraceptives are also used secretly by some women (Terborg, 1999). The study findings indicate that women may use contraception without the knowledge of the husband or family.

Reproduction

In the qualitative study, most women have freedom concerning reproductive decisions. However, the partner may also influence the decision. Each of these aspects has a different impact on fertility. If the woman determines, she may have a lower demand for

[47] Hollerbach talking about fertility decision-making processes, distinguished different types among which are coercive (when one individual has the power to enforce a decision on another but involves elements of choice), joint (decision reached by two or more individuals on the basis of accommodation, compromise, compliance, or mutual agreement), and unilateral (if made by one or more individuals in conflict with the desire of another, either openly or surreptitiously) (Hollerbach, Paula E. 1983, p.353 In: Bulatao and Lee (eds), 1983).

children. Conversely, if the man decides, then the woman may have unwanted pregnancies that could increase the number of children.

Contraception

The dependence on the partner's decision is another social influence affecting some Maroon women's contraceptive behavior. If it (partner has a negative attitude) negatively impacts the fertility control decision, then nothing is used to prevent unwanted pregnancy, resulting in turn in the rise of fertility. But on the other hand, if the woman can decide to use or not use contraception, then she has control over her reproductive life. Most women in the study decide to use contraceptives by themselves, but there are also cases where the husband or both partners decide. Goede (2011) confirms that partners can also decide whether a woman can use contraception or that women could choose for themselves. The study findings show another way where "others" may influence decision making. Based on the advice of the doctor, the woman could choose to use contraceptives.

Choice of partner

These study results show that women are free to choose their partners. If one has the liberty to select a partner, it can motivate them to have children with the partner.

Age of sexual initiation

Another aspect of autonomy in reproductive decision making is the choice of having sex. The study findings show a delay in sexual experience. When a woman has a choice of delaying sexual intercourse, this is also an indication that the woman decides when she is ready for sexual intercourse.

5.1.4.2 Dynamics in cultural institutions and fertility attitudes

Dynamics in cultural institutions and attitudes related to fertility show that Maroons are in the process of change. The study findings and literature indicate some changes in traditions, cultural institutions, and attitudes of the social environment concerning polygyny, marriage, contraceptive use, and children.

Polygyny

Some factors have affected the non-acceptance of polygyny in Maroon societies. Both study findings and the literature confirm this change. The results of the study indicate generational and socioeconomic factors. Christian values, education, and female financial independency have influenced this practice also (Adams, 2003; Amoksi, 2009; de Beet and Sterman, 1981; Menig, 2008).

Another factor is that the urban environment does not encourage the practice of polygyny (Amoksi, 2009). Economic crises and awareness of the risk of sexually transmitted diseases could also alter people's views concerning this practice (Amoksi, 2009; Terborg, 1999). The non-acceptance of polygyny may restrict men from having high numbers of children if they have one wife.

Contraception

The findings of the study suggest that changes are occurring in the immediate social environment of the respondents regarding fertility regulation. Some partners and families have a positive attitude towards contraceptive use. In the past, older people did not use contraceptives, but the study findings also reveal that older respondents, too, use or have used a contraceptive method. These alterations in attitude also imply a difference in the perspectives of Maroons concerning fertility regulation. With the occurrence of positive attitudes, the practice of fertility regulation can rise.

The literature reinforces that Maroons were not practicing fertility control in the past (De Beet and Sterman, 1981; Hurault, 1959). Also, Maroon men and women disapproved of family planning (Adams, 2003; Terborg, 1999).

Children

Although the study findings show that the respondents still attach value to children, some of them do not want more children. Consequently, women may have fewer children. On the other hand, study findings and literature show improvements in education among Maroon women. Attaining a higher educational level can delay childbearing. However, education does not need to prevent childbearing.

During the interviews, some of the respondents made known that they kept their pregnancies while being in school and continued with education after childbirth.

These factors reduce the number of children. The smaller number of children jeopardizes cultural conceptions. For instance, the responsibility of the woman to produce children for the continuity of the lineage is changing because she has fewer children now. The cultural notion that childbearing cannot be hindered, as mentioned by Terborg (1999), is also compromised when contraception is practiced. Having fewer children also affects the prestige or social status that one gains from having many children.

On the other hand, crucial reasons for having children such as old-age security, company, support, and the different gender-specific roles of boys and girls still inspire people's reproductive behavior. Religion is also a crucial factor since women believe that God determines their reproductive outcomes.

In line with the hypothesis, the reproductive preferences and values of Maroons support them in maintaining a relatively high fertility rate. The cultural notions are still intact for motivating reproduction. The study findings conclude that respondents still want children and attach value to children.

Contrary to the hypothesis, some cultural institutions and notions supporting fertility are in the process of being modified. In the long run, the cultural institutions and beliefs that encourage them to have children might diminish or erode.

5.1.5 Contraceptive behavior

The use of contraceptives is a critical determinant that affects fertility. Contraceptive use limits the family size.

Maroons' behavior regarding the practice of fertility control has changed over time. In general, the practice of contraceptives among the Maroons has not changed and remained stable during 2010-2018. Still, the prevalence of contraceptives among Maroon women is low compared to other ethnic groups in Suriname. Overall, the percentage of Maroon women who are currently using a contraceptive method was close to 24 percent in 2010 and 2018.

The literature shows a change from no use to low use in contraception. The current study shows little use but a change in variation of use among the age groups. Maroons did not use contraception in earlier centuries. De Beet and Sterman (1981), Hurault (1959), and S. Price (1984/1996) mentioned no practice of fertility control among the Boni and Matawai and Saamaka societies. Other studies talk about the low use of fertility control among the Maroons in the Interior and Paramaribo (Adams, 2003; Goede, 2011; Jagdeo, 1993; Terborg, 1999).

Education and the area of residence also display transformations. Variation in contraceptives according to educational level during 2010-2018 occurred among Maroon women in all educational levels. Increased education leads to exposure of knowledge and, most likely, higher acceptance of contraception and family size limitation. Even though the overall percentage of contraceptive prevalence was stable from 2010 to 2018, the areas where Maroon women are residing show differences. All areas indicate a decrease among young women aged 15-19. The urban area mainly shows a reduction in use, except in the age group 20 to 35. Also, rural coastal regions have experienced a declining trend, while the rural interior noted a rise in contraceptive use. Contraceptive

use declined in both urban and rural coastal areas, which could have decreased further the overall use of contraception. Nonetheless, because of the increase in the rural interior, the percentage did not drop more.

Other factors can also bring about changes in attitude and behavior regarding contraception. Financial and health reasons may impact people's contraceptive attitudes and motives to have fewer children. Terborg (1999), said that nowadays the contraceptive use has increased, because of increased living costs, desire for fewer children, difficult economic situation, poverty, and risk of complications during childbirth. In the city, women become more aware of the use of contraception. Amoksi (2007) declares that Maroon women in the city are more conscious of practicing family planning and delaying marriage and childbearing. The study findings also indicate changes in female contraceptive use in the rural interior.

5.1.5.1 Generational differences

Young Maroon women did not use more contraception than previous generations. The study findings show that contraceptive practice of the most youthful women aged 15 to 19 has declined. However, contraceptive use increased among young women aged 20 to 29. Among the older generation, the 30-34 age group has experienced the highest intensity. The rise in practicing fertility control in these age groups leads to a decrease in the number of children and, consequently, fertility declines. The percentage of contraceptive prevalence was lower among the older age group 40 and above since they may have a lower need for contraception because they are nearing the end of their reproductive period. It can also mean that they still desire children before the end of their reproductive lives.

Although there is a fall in the total fertility rate (TFR), Maroons still have the highest TFR compared to other main ethnic groups in Suriname. Urban Maroon women have experienced, on the other hand, a stable fertility level that is above replacement fertility. Reasons for maintaining a relatively high fertility level are that Maroon women have the

highest mean parity at ages 25 to 49 compared to women in other ethnic groups. Nearly all Maroon women have children at the end of their reproductive life. They also show an older mean age of fertility pattern, indicating that they maintain a high fertility rate at the older ages of the reproductive period. The declining trend of contraceptive use among adolescents and other changes related to their sexual, union formation, and reproductive behavior have an impact on the fertility rate of Maroons.

Additionally, the fertility rate remains high even though the overall contraception use stays stable, can also partly be explained by the late start of using a method to prevent pregnancy among respondents in the study. Most women do not practice birth control at the beginning of their childbearing life, despite being aware of contraceptive methods. These women do not begin using contraceptives until they have a child or several children. Consequently, women already have children before they decide to practice fertility control, which, in turn, contributes to sustaining a relatively high fertility rate.

5.1.5.2 Traditional and Modern Contraceptives

Cultural and modern contraception methods

The results of the study indicate that women are knowledgeable about cultural and modern contraception methods. Many respondents were aware of the existence of cultural methods to get pregnant such as the use of herbs, massage of the uterus, and rituals. De Beet and Sterman (1978) said that Maroons use traditional fertility treatments when women cannot get pregnant to improve infertility. The findings indicate that a few women have used a cultural method to get pregnant and were successful in conceiving a child; this is most likely effective. Others are willing to use a cultural method if they are not able to conceive. The presence of these kinds of treatments for infertility indicates how essential fertility and, therefore, children are to Maroons.

On the other hand, most respondents in the study knew only about modern contraceptives to prevent pregnancy and are using it effectively. De Beet and Sterman (1978) also

mentioned that sometimes the Matawai practice coitus interruptus, but they also know a few methods to avoid pregnancy.

Awareness and access

Young and older women in the study are aware of different methods to regulate fertility and where to obtain these methods. The school is a significant provider of family planning and reproduction knowledge. Education about fertility regulation strengthens female empowerment in reproduction. Contraceptive awareness and access point to knowledge and the availability to practice fertility control, thus having the opportunity to make informed decisions regarding family planning. The literature also confirms that Maroons are knowledgeable about contraception (Adams, 2003; Goede, 2011; Terborg, 1999).

The study findings contradict the hypothesis that the methods used were ineffective or ineffectively applied, contributing to the relatively high fertility rate of the Maroon women in Suriname. Fertility remains relatively high, not because the contraceptive methods were ineffective or ineffectively applied. The results of the study only reveal one case of contraceptive failure, resulting in pregnancy. The study findings clearly show universal awareness and easy access to fertility control methods. Greater access and awareness may result in higher levels of contraceptive use because contraceptives are within reach.

Consequently, influencing the use or non-use of contraceptives. Universal knowledge about fertility regulation does not necessarily lead to the practicing of fertility control or an increase in the use of contraception. A possible explanation can be that people are not fully aware of the proper application of contraceptives, and therefore are cautious about using a method. Also, despite the knowledge and access to modern contraceptives, most respondents do not plan their pregnancy. Most of these women start using a contraceptive after having a child or several children. Goede (2011) mentioned that most women in her research do not plan their pregnancies. Unintended pregnancies may be understood from the pronatalist point of view, where fertility is valued. On the contrary, if, according to Goede (2011), some women express to terminate their pregnancy, it shows a change in fertility behavior, as Adams (2003) notes that women in some Saamaka villages are

against abortion. The impact of city life may alter attitudes towards the termination of a pregnancy, and it also suggests the use of another means of fertility control other than contraception.

5.1.5.3 Selective application of contraceptives?

Awareness and easy access are not the only factors that impact people's decision to practice fertility control. Reasons, experiences, and views may give an understanding of the low contraceptive prevalence. One's social environment may influence their decision to practice family planning.

The respondents view contraception mostly as suitable for birth control and protection against sexually transmitted infections (STIs), but some do not choose to practice fertility control. A few find contraceptives are not reliable. The study findings show that a positive view does not need to affect one's reproductive values and preferences.

Reasons for using

Women in the study are using modern methods more than cultural methods, even though some women experience side effects and contraceptive failure. On the other hand, some respondents had a good experience with contraceptives.

Reasons for using or not using contraceptives may indicate the motivation or disinterest of contraception and explain why the prevalence is still low.

Women's own experiences may also prevent or stimulate the use of a contraceptive. Prevention will lower the practice of fertility control, while stimulants will increase contraceptive use. Depending on the experience, the impact on fertility will be negative or positive. Prevention of pregnancy positively affects fertility, thus limiting the number of children.

Social influence is present among the women in the study. Social attitudes may affect their contraceptive behavior negatively or positively.

Most husbands agree or encourage contraceptive use. Some husbands do not want their spouse to use fertility limiting methods, because of their desire for children, or they believe that their wives will not be able to get pregnant.

Families agree, disagree, or avoid intervention when it comes to family planning. Reasons why families approve or disapprove using a method vary. Educated or modern families accept or allow fertility control so that the girl can complete her study or if she has just given birth, she can wait for the next pregnancy. If she cannot take care of the children, she may use something to prevent another pregnancy. The traditional or less educated families do not agree with the use of contraceptives, believing that children are wealth, and therefore, the woman must have children. Preference of offspring is the principal motive for refusing the use of contraceptives.

Other explanations are mentioned in the literature. A crucial reason why Maroons would disagree with using a fertility control method is that fertility is valued. Terborg (1999) stated that procreation is a fundamental ideology of Maroons. Goede (2011) and Terborg (1999) mentioned that children are desired and give social status or prestige. Koole (2010) said that contraceptives are an obstacle to have many children because reproduction is essential for the expansion of the clan. Adams (2003) indicates that women are not willing to use contraceptives because they want children and believe that it can thwart the work of God.

Terborg (1999), Adams (2003), and Goede (2011) talked about other factors that prevent the use of fertility control. The resistance of contraception affects the practice of contraception. Men’s attitude toward contraception differs from women. Maroon men resist because of the wish for children. Men view a condom only as protection against STIs and associate contraceptive use with possible infidelity of the wife during their absence (Goede, 2011; Terborg, 1999). Sometimes women share a similar view as men that a condom is protection against STIs and not to prevent pregnancy (Goede, 2011). Some women resist contraceptive use because of negative experiences or fear created

from stories of other women (Goede, 2011). Some Maroons also think that only evil persons use contraceptives because contraception 'kills the child' (Adams, 2003).

The research findings suggest two types of fertility regulation. Methods are used to stimulate conception, thereby increasing fertility. Also, methods are used to prevent pregnancy that will decrease or negatively impact fertility. Literature often focuses on fertility control that will result in declining fertility (Bongaarts, 1978; Easterlin, 1985). However, in societies like the Maroons in Suriname where fertility is essential, ways are known to improve fertility.

The results partly support the hypothesis that contraceptive methods are used selectively to plan when and with whom to have children. Women in the study stop using a contraception method when they want a child. Contraception is also used selectively as protection against STIs and regulating or delaying menstruation, thus will indirectly influence the prevention of pregnancy.

On the other hand, attitudes, and experiences of the woman are essential for women to decide if fertility control will be practiced. Other determinants are also crucial in understanding the low contraception acceptance of Maroon women. The social environment is also an essential factor. Religion, culture, families, partners, and cultural institutions and beliefs are crucial in encouraging fertility. The notion that contraception hinders procreation could also be an essential factor that contributes not to practice fertility control easily. Fear is another factor that makes women object to contraceptive use. The study findings also suggest that fear of adverse side effects avoid the use of contraception. Goede (2011) said that other women's negative experiences with contraception caused Maroon women to fear modern contraception. There is also the belief that pregnancy is from God since Adams (2003) indicated that contraception thwarts the work of God if one prevents pregnancy. This milieu that surrounds the Maroon woman may discourage contraception. Noteworthy also is the cultural fertility treatments to improve fertility that imply that women can try to get pregnant when conceiving is difficult.

The study findings and the literature reveal, there are changing attitudes, positive experiences, and circumstances that lead Maroons to practice fertility control. Methods are mainly used to prevent, or space pregnancy-resulting in the reduction of the number of children. Because of economic and health circumstances, some do not want or are not able to continue childbearing. Others space the pregnancies because Maroons believe that a new pregnancy so quick after the other will lead to malnourishment or sickness of the former infant.

5.1.5.4 Postpartum practices

Even though the overall contraceptive use did not change but remained stable, other ways to space childbearing are practiced. Postpartum practices can also be another explanation or factor for understanding the low use of contraception and contribute to limit family size. Postpartum practices are determinants of natural fertility. Continuous breastfeeding may affect fertility by spacing pregnancies.

Breastfeeding

Socio-demographic characteristics of the women in the study do not affect postpartum practices. Still, some causes prevent women from breastfeeding their infants. The results show that the health conditions of the puerperal woman or dislike of breast milk by infants are reasons for the prevention or discontinuation of lactation practices. Women do not decide to breastfeed because of unwillingness or as a result of urbanization. The study findings reveal that the practice of breastfeeding is universal among these urban women, and the duration does not vary either among young and old respondents. Adams (2003), De Beet and Sterman (1981), and Lamur (1995), also confirm the practice of breastfeeding among the Saamaka and Matawai. The length of breastfeeding is decreasing, although the practice is still considered essential. Adams (2003) and Polimé (2000) also indicate a decrease in the periods of lactation. Nag et al. (1980), and Coale (1984) declare that prolonged and intense postpartum practices can reduce reproduction.

On the other hand, declines in postpartum practices may increase fertility in the absence of different forms of fertility control.

The results of the study show that there is widespread awareness among all women, young and old. These women receive information about the importance of breastfeeding from various sources. In urban areas, the role of social influence is significant in motivating the attitude and, as a result, has a positive impact on lactation practices.

The study findings concerning breastfeeding practice are in line with the literature that breastfeeding is an essential part of the postpartum practices of Maroon women. Adams (2003) gave the reasons also support the study findings that breastfeeding is necessary for the health and development of the child. De Beet and Sterman (1981) also confirm that breastfeeding continues until the child can walk. But Polimé (2000) adds that breastfeeding cannot continue when a woman becomes pregnant during the lactation period because Maroons believe that the child will get sick or may take longer to walk.

Postpartum abstinence and other postpartum rituals

Another postpartum practice is sexual abstinence. The results of the study reveal that postpartum practice is universal. Culture restricts women from engaging in sexual intercourse after childbirth for three months. Many women tend to adhere to the practice as recommended by the culture. But there are a few that resume sexual activity earlier than the prescribed period. The literature reveals that Maroons abstain from sexual contact after the birth of a child (Adams, 2003; de Beet, and Sterman, 1978; Polimé, 2000).

There are other postpartum rituals besides breastfeeding and postpartum abstinence. All respondents in the study are knowledgeable about and practice these reproductive rituals during the postpartum period. Even respondents that do not have children yet know about these traditions.

Cultural beliefs influence the preservation of the practice of sexual abstinence and rituals after birth. There are consequences for the infant or the mother. Maintaining these

practices help to avoid another pregnancy, recovery of the puerperal woman, mainly the uterus and the vagina, prevent illness of the infant and the mother. Not keeping these customs also has consequences for the infant. The child can get sick or malnourished when the woman gets pregnant with another child. Polimé, (2000), and van Nadel et al. (2008) explained the significance of these postpartum rituals: to have good breastmilk, to clean the womb, to purify the blood, to get a flat belly, and to prevent cold during the maternity period.

The social environment also supports respondents in the study to adhere to the practice. It means that there are external pressure and influence on the woman to live up to these rituals. The family safeguards the observance of the postpartum abstinence and assists with the reproductive rituals such as the hot herbal baths. Polimé (2000), indicates that the social environment will remark that the woman is poorly cared for during the maternity period by her close relatives. On the other hand, according to Amoksi (2009), people adhere to the rituals surrounding childbirth because it is in the interest of women. Maroon women believe that these herbal baths will bring back the uterus and vagina into their original state.

5.2 Implications for Theory and Research

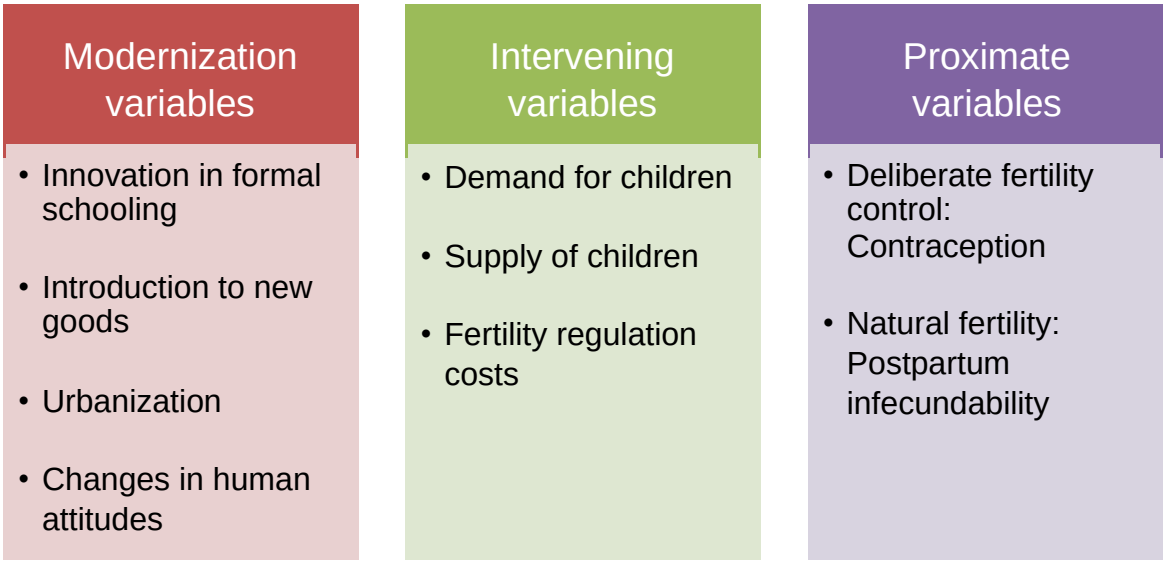
This section discusses how the results connect to the theoretical framework.

Various factors can influence demographic processes and thus explain the demographic transition taking place in a population. Developments and changes occurring in a population or country may contribute to transitions. People's attitudes, behaviors, characteristics, and values influence demographic change. People are, in turn, affected by this development.

5.2.1 Easterlin's framework to explain fertility change

Easterlin's framework, one of the central references to this study, focuses on the relationship of the direct/proximate determinants of fertility change (namely the socioeconomic and cultural characteristics) and the intervening variables (children supply and demand, and fertility regulation costs). This study applies some determinants of this framework to the fertility behavior of the Maroons in Suriname. The respondents in this study live in the urban region of Suriname, indicating that they have been exposed to urbanization, modernization, and its related impacts. This section concentrates on intervening variables demand for children, potential supply, motivation for fertility regulation, and modernization variables like innovations in formal schooling, introduction to new goods, urbanization, and changes in human attitudes. In this study, we found that the Maroon fertility changes recognized among the interviewed women living in Paramaribo can be a consequence of the relationship between proximate and intervening variables, illustrated in Figure 5.1, where the proximate determinants of deliberate fertility control, specifically contraception, and natural fertility, namely postpartum infecundability, have significant presence.

Figure 5. 1 - Framework applied to Suriname Maroon fertility



Source: Researcher's elaboration

Demand for children

Easterlin said that family size desires relate to the demand for children.

In the study, there is a variation of demand for children among several groups of women. Despite age, both young and old respondents desire a higher number of children. In contrast, only respondents in the older age category 30 and over want fewer or equal number of children than their current number of children. All the young respondents aged 15 to 29 who already have children desire a higher number of children.

Easterlin also noted that there are differences in the demand for children among households because of variation in taste, price, and income. In this study, a proxy for income is educational attainment. The value of children and the preference of children in Maroon societies imply respectively to the price and taste in Easterlin's framework. The study findings show that women with secondary and higher educational level (see Table 4.2.3 in chapter 4), have children of which a slightly higher number has more than two children. Educated Maroon women do not have lower demands for children because of

their educational level. Women with lower education have a similar trend than women with high education.

The study shows that Maroon societies are matrilineal. Children are essential for the expansion and survival of the lineage. Hence, this cultural institution encourages childbearing. The expectation, therefore, may influence the reproductive desires, and affect the demand for children of the respondents. Partners and families want children, primarily as offspring. All respondents value children. Children provide social security at old age, companionship, support in times of illness, help with domestic chores, and positive feelings.

Furthermore, children are viewed as wealth and enhance the social status or prestige of Maroons. Religion, both Christianity and Traditional, hold a favorable view concerning children. Having many children give social status or prestige. The culture indicates that the woman has value if she has children. However, respondents who find that they should be able to care for their children could be motivated to limit their family size.

Although Easterlin ignores sex preferences, he did mention that it could be included as a factor in other studies. The findings indicate that respondents prefer a sex mix, both girls and boys are essential. This is related to gender-specific roles. Mostly girls are needed to ensure offspring, maintain the progress of the culture, and support of the mother. Boys, on the other hand, are in authority, the transference of leadership goes to a man, they make decisions, and can take care financially of their mothers. These gender-specific reasons are another factor that influences the demand for children.

Potential supply

Easterlin mentioned some immediate determinants of natural fertility (a) period of exposure to intercourse, (b) duration of postpartum infecundability. These factors, in turn, may depend partly on physiological or biological factors and partly on cultural practices and can reduce the reproductive potential of the population. According to Easterlin, there is no deliberate fertility control if postpartum abstinence is a taboo while the mother

lactates. The practice is, therefore, a cultural condition that keeps natural fertility below the physiological maximum.

The findings of this study show that the respondents preserve postpartum practices. The practice of breastfeeding is universal among the respondents. Given the fertility inhibiting effects of the duration and intensity of breastfeeding, it affects the spacing of childbearing.

Postpartum abstinence is universal and reported to be strongly influenced by cultural beliefs.

Thus, the combined practices of breastfeeding and postpartum abstinence after childbirth, shown among the urban Maroon women, keep the natural fertility of Maroons below the physiological maximum and affect their potential supply of children.

The motivation for fertility regulation

The demand for and supply of children determine the motivation for fertility control. Easterlin stated that there is no desire to limit family size when potential supply is lower than the demand. The author mentioned that people would have a demand for ways to enhance fertility and for the adoption of children. Easterlin did not expand on ways to enhance fertility. His theoretical framework focuses on the decline in fertility and not as much to increase fertility. The results of the study indicate that the respondents know and use herbal medicines, rituals, and uterus massages to stimulate pregnancy when the woman cannot get pregnant quickly or is infertile. Once these fertility treatments are effective, they impact fertility positively.

On the contrary, according to Easterlin, where the potential supply surpasses the demand, the likelihood of unwanted children would motivate to regulate fertility. There is a demand for ways of limiting fertility. The study reveals that most respondents did not plan one or more pregnancies. These women practiced birth control after having a child or several children. Many of the respondents did not exercise fertility control at the start of childbearing life, despite being aware of contraceptive methods. Some reasons for not planning their pregnancies- want a child for the partner, want another child, or could not

get pregnant quickly- suggests that unintended pregnancies do not mean that these are unwanted pregnancies. Not getting pregnant fast enough indicate that the potential supply is lower than the demand for children. Thus, biological factors affect the potential supply.

Wanting another child, suggest that there is no need or desire to limit family size. Hence, there exists no motivation to regulate fertility. The occurrence of unintended pregnancies indicates that the woman does not determine the number of children before the start of her childbearing period.

The main reason why respondents in the study do not want children is that they reported that they would not be able to take care of the child because of the economic situation in the country, personal financial situation, or the health condition of the respondent. Financial and health reasons can motivate the respondents to desire smaller families and practice deliberate fertility control. Hence, the reason why women limit their family size is not because of supply exceeding the demand, but outside factors that are beyond the will of the woman.

Fertility regulation costs

Easterlin further stated that motivation is a necessary condition but not a sufficient condition for fertility regulation. Costs of fertility regulation also impact the practice of fertility control. Fertility regulation imposes two types of expenses on the household. Physic costs refer to the displeasure associated with the idea or practice of fertility control. Market costs consist of the time and money necessary to learn about and use specific techniques. Costs, in turn, depend on (a) attitudes in the society toward the fertility control and toward particular methods, and (b) the degree of access to fertility control, in terms of both the availability of information and the variety of specific techniques and their prices (Easterlin, 1985, pp. 17-18).

Fertility regulation costs among Maroon women in the study are affected by views, experiences, and attitudes. The attitude towards contraception differs among the respondents. Some factors are side effects, fear, the religious reason that it is a sin to

practice birth control, or even no reason. Mainly young respondents aged 15 to 29, mention side effects and fear as reasons for not using contraception. Other respondents give different reasons implying that contraceptive methods are unreliable; God gives children, ancestors were not practicing fertility control, wish for children, or Maroons do not talk about contraception with their children. Some respondents have a favorable view of the use of contraceptives. However, a positive attitude does not mean that one will use a contraceptive method.

The attitude of society may influence the opinion and behavior of the respondent. The immediate social environment of the respondents is the partner and the family. The view of the family and husband concerning contraception might affect the contraceptive behavior of the respondents. Some husbands agree or encourage the practice of fertility control. In contrast, others disagree since they want children or think that the wife will not be able to get pregnant after using a contraceptive method. Also, some families disapprove because they want offspring. On the other hand, some families approve because they support the respondent to complete the study or if one will not be able to take care of her child. Therefore, the positive or negative attitude may affect the use or nonuse of fertility control.

Easterlin stated that costs depend on access to fertility control. The study findings reveal that information and different methods are available. Knowledge about contraceptives is universal, and respondents receive information about the techniques and their application through various sources. The respondents also get their contraceptives from different sources. However, awareness and access do not necessarily result in using a method of fertility regulation. Some respondents are not using contraception despite being knowledgeable about their applications.

Easterlin claimed that if regulation costs are relatively higher than the motivation, people will refrain from adopting fertility control. The author further said that the costs impact the acceptance of birth control, which explains why respondents who report that they want no more children, do nothing to avoid pregnancy. Respondents who wish to have no more children are motivated, according to Easterlin. The findings of the study suggest that the

respondents do not have a wish for more children because of economic/financial- and health reasons. Respondents want to be able to take care of their children. Thus, the reason is because of outside circumstances. The costs to take care of the children is more substantial than the fertility regulation costs. Therefore, fertility regulation costs are not the dominant factor that motivates Maroons to adopt fertility control methods.

The theory of Easterlin focuses on limiting numbers of children and disregard the use of control for the spacing of children. The study shows that the respondents mainly use contraceptives methods like birth control to space or limit births, protection against sexually transmitted diseases, and regulation of menstruation. Thus, not all respondents use contraception as a fertility control method. However, as an indirect result, if the woman that uses a contraceptive method to regulate her menstruation or to protect against diseases is sexually active, it will also affect fertility.

Links from Modernization to Supply, Demand, and Regulation costs

Different features of modernization may influence conscious family size limitation.

Innovations in formal schooling

Education is an essential factor that influences fertility control behavior. According to Easterlin, it affects all three determinants: supply, demand, and regulation costs. Easterlin mentioned that knowledge contributes to better health conditions and therefore improves the potential supply by raising natural fertility and increasing the survival chances of babies. Besides, education may also weaken cultural practices, such as postpartum abstinence and extended breastfeeding. Education may lower fertility regulation costs by providing information on various methods of fertility control. Thus, reducing the expense in time and money. It may also modify cultural norms unfavorable to the practice of family size limitation. Hence, lowering the subjective costs of fertility control. Lastly, education can reduce the demand for children.

The study results show that the education of the respondents does not weaken postpartum practices. All respondents maintain these practices. Their statements imply

that postpartum practices are beneficial to the infant and the puerperal woman. They explicitly concern the development/growth of the child and recovery of the reproductive organs of the woman. Furthermore, the study findings reveal that although respondents are informed about various methods of contraceptives, they do not practice fertility control. The reasons for not using explain why, especially, young respondents do not wish to use contraception. The reasons concern mainly fear of side effects. Most respondents also have a favorable view of contraceptives, but this does not encourage them to use a method. Even if the fertility regulation costs are lower due to education, this does not motivate women to use a method. What is interesting in the study is not the educational level of the woman, but economical and health conditions reduce the demand for children. These women also want to be able to take care of their children. Some respondents also try to have another child because they feel they have enough of one gender or because their current partner wants it. Having children of both sexes is essential to them because of various gender-specific roles in the Maroon culture.

The introduction of new goods

Another aspect of modernization is the continuing introduction of new goods.

Some of the new goods associated with modernization entail methods of fertility control. According to Easterlin, the costs of fertility regulation decrease because of the availability of a variety of contraceptive methods. They may also lessen subjective costs by giving people alternatives.

The study reveals that a variety of contraceptives are obtainable. However, the opinions, experiences, and social influences prevent some women in the study from using a contraception method. These factors may not lower subjective costs. However, some women keep using contraception despite the side effects that they are experiencing because they want to prevent getting pregnant. Thus, a variety of options and low prices of fertility control methods may not be the only factors that will encourage or lead to disinterest in practicing fertility control.

Urbanization

Easterlin mentioned that an urban environment decreases the demand for children. Several factors, such as high food prices, make the costs of children higher in urban areas. The subjective and market costs of fertility control also decrease because of greater access to fertility control knowledge and lower prices. Urbanization might also influence the potential supply by reducing breastfeeding practices.

The study findings show that economic or financial reasons let respondents decide to reduce or stop childbearing. These women report that the costs of goods have increased and therefore they cannot take care of more children. So, the costs of children in urban areas are high. The fertility regulation costs decline because women have knowledge about and can access fertility control methods. Still, reasons such as fear of side effects prevent some respondents from using a technique. However, urbanization did not stop the respondents from sustaining postpartum practices. The study results show that breastfeeding, postpartum abstinence, and other postpartum practices are universal. Social control is an essential factor as family members and the social environment see to it that the puerperal woman continues the traditions.

Further, the social environment will make remarks if they notice that the puerperal woman does not adhere to the postpartum practices. In addition to the cultural tradition of breastfeeding, also governmental efforts are made to encourage these women to practice breastfeeding. Some respondents indicate receiving information about the benefits of breastfeeding from others like the hospital where they had delivered their baby. These findings imply that culture or traditions are more influential factors.

Changes in human attitudes

Easterlin also mentioned that changes in human attitudes and personality are one of the modernization variables that could be included in the framework. The author did not expand on this feature. The results in the study reveal changes in the attitudes of respondents and their immediate social environment. There are changes in living forms.

Traditional marriages and polygyny are changing. Many respondents are in cohabitating unions and not traditionally married. A few had interethnic marriages. Some husbands' and families' attitudes concerning the use of contraceptives are also transforming. The ancestors of the Maroons did not practice birth control. In the past, traditional marriages occurred at young ages, mainly after the rites of passage to the adult age of 16 years for girls, when sexual activity also began. However, the age at first sexual union and childbearing is increasing.

In sum, the study agrees with Easterlin that through modernization, fertility regulation and fertility are influenced. However, in the context of the Maroons, other factors should be taken into consideration. The study's conclusions show that culture, religion, and the social environment are influential factors that impact Maroon women's reproductive life. Social control and social influence are essential factors in adhering to traditions such as postpartum abstinence and other practices. Educational level and labor force status do not need to be factors that motivate people to limit their family size.

Easterlin's framework focuses only on fertility regulation that leads to fertility drop. The findings of the study suggest that there is also fertility regulation to treat the infertility of women. Thus, if these treatments to enhance fertility are adequate, they will increase fertility. Some respondents experienced that such fertility treatments are successful.

5.2.2 Demographic transition theory

Demographic transition models tend to explain transformations that focus on shifting from high birth and death rates to low birth and death rates.

The study agrees with the literature that in the beginning phase of modernization, the fertility level does not have to decline immediately, and in a later phase, could decrease. The fertility rates of Maroons residing in an urban region have declined but are still above the replacement fertility level. Despite the social and behavioral changes that have occurred, as discussed above, this study's findings indicate that the contraceptive prevalence has not changed. There is even a rise in the practice of breastfeeding among the Maroons. The previous discussions indicate some factors that most likely contribute to maintaining a fertility level above the replacement level of 2.1. This comes to show that the qualitative findings are critical to understand these developments. As discussed before, the qualitative results emphasize that children have value, postpartum practices are crucial, contributing to the low contraceptive prevalence are the wish for children and the fear of side effects or belief that contraceptives are unreliable. Also, having children guarantees ones' position as an ancestor and social status and prestige. Moreover, children are social security in old age, run errands and help in times of sickness.

The study findings further reveal that breastfeeding is universal. Because of medical reasons or that the infant does not like breastmilk, the length of lactation is shortened. Lamur (1995) and van Eyk (1830) mentioned, as discussed previously in section 2.3.1.6, that the Saamaka population during the 19th and early 20th centuries had extended periods of postpartum practices, two years of breastfeeding, and 17 months of postpartum abstinence. Polimé (2000) also said that the Ndyuka had declined their breastfeeding duration to six months. This information about prolonged periods of postpartum practices in the past suggests that Maroons, specifically Saamaka, have changed the length of postpartum practices but have maintained the practices. Even in the urban region, Maroons still abide by these practices.

Contrary to Spoorenberg (2017), the study findings do not suggest that the Maroon women were not able to adapt their reproductive behavior immediately. There are other factors, such as culture, religion, and social environment influences, as discussed previously, that shape their reproductive behavior.

There is no doubt that societies have experienced or are experiencing transitions in their demographic processes. The order of the phases of the Demographic Transition phases does not apply to societies like Suriname and the Maroons. Also, some features of the western transitions occurred earlier in Suriname and Maroon societies. These points of discussion have already been cited in section 2.3.1.9- Colonial Suriname and Maroon societies versus European demographic transition, and section 5.2.3 -Factors present before the Demographic transitions.

5.3 Limitations in this research

The qualitative data does not represent the whole Maroon population, and therefore, no generalization can be made. They were collected aiming to a better understanding of the perspectives, beliefs, and culture.

While many Maroons live in the interior, (namely Sipaliwini, Brokopondo, and Marowijne), this research was conducted in the urban areas of Paramaribo and Wanica. It should be noted that these respondents were either born in Paramaribo, went to school, work, and commute daily to Paramaribo since the distance between these districts is not great. The urbanized areas of Wanica are around Paramaribo. Hence, factors such as urbanization could influence the group of respondents' reproductive preferences, contraceptive use, and so on, on a larger scale compared to Maroons living in rural areas. However, in recent years there are developments taking place in the rural regions of Suriname, such as improved health care, access to education, improved transportation, meaning differences between rural and urban populations may eventually dwindle. In any case, the result of the urban setting of the research is that the findings are not generalizable for the whole Maroon population.

Furthermore, we are dealing with the women's perception of their husbands' and families' attitudes, whose actual opinions, however, may be different.

Lastly, in this study the MICS data are used for comparison purposes and as a background and complement of the qualitative evidence about the reproductive behavior. Also, MICS data has the potential for research in a variety of areas concerning children, women, and currently also men in reproductive ages.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The purpose of the study was to identify fertility change in the Maroon population and examine the factors that could indicate if those living in the urban area of Suriname are undergoing a demographic transition.

Regarding the literature review, the aim was to investigate, review, and synthesize the theoretical frameworks about fertility transition analysis and relevant information about the Maroon population of Suriname. The literature review discussed Bongaarts' and Easterlin's frameworks of fertility determinants. The study also examined literature regarding the impact of the early phase of modernization on fertility. Furthermore, the literature review focused on beliefs, traditions, women's status, contraceptive use, marriage forms, sexual behavior, the value attached to children, postpartum practices, and urbanization; factors that influence fertility behavior. The role and impact of urbanization in general on Maroon's life and female Maroons were discussed. Additionally, a demographic context is given of how the Maroon societies came into existence in Suriname.

The two methodologies (quantitative and qualitative) helped to perceive changes in the reproductive behavior of Maroon women.

The MICS 2010 and MICS 2018, allow us to detect changes in the reproductive behavior of the Maroons and to indicate whether they are undergoing a process of demographic transition. Furthermore, the qualitative results from the group of Maroon women that have participated gave a profound understanding of the quantitative findings.

The first objective of the study was to identify the fertility level of Maroon women compared to women of the rest of the ethnic groups in Suriname through statistical analysis of surveys and Census data. The fertility rate of the Maroon population has declined significantly from 5.3 to 4.1 between 2010 and 2018. The fertility level decreased by 23

percent. However, it remained at relatively high level if compared to the other ethnic groups in Suriname. MICS data also show that urban fertility is lower than rural fertility. At the national level, estimates indicate that the Maroons average fertility level is higher compared to that of the Maroons living in Paramaribo.

Secondly, the study aimed to investigate whether Maroon women are in a demographic transition. Changes have occurred in several areas regarding reproduction, marriage forms, and socio-economic characteristics, which also indicate that these changes had an impact on the fertility level of the population. Several factors influence the fertility level of the Maroons. Regarding socio-economic changes, there are improvements in the educational levels of women. The behavioral changes suggest that there is a delay in the age at first sexual intercourse, modifications in union formation among adolescents, reduced teenage pregnancy, permanence of universal breastfeeding practices, stable contraception use, rise in contraceptive use among the central reproductive ages, and a decline in fertility. The study findings show that respondents maintain postpartum practices such as breastfeeding and postpartum sexual abstinence, which also are fertility inhibiting factors. These changes lead to the postponement of childbearing, spacing of pregnancies, and, consequently, lower numbers of children born. As a result, fertility change has taken place among the Maroon population.

The third objective of the study was to identify the contraceptive prevalence of Maroon women. MICS data revealed that the prevalence of contraception among Maroon women remained stable despite the fertility decrease. The finding of contraceptive use is not consistent with the decline in fertility. Contraceptive use has decreased among young Maroon women. However, the middle age group 30-34 has experienced remarkable intensity in the contraception use.

Fourthly, the study purposed to identify factors associated to the process of demographic change of the Maroon women. Qualitative results did point to some changes among the respondents like the practice of polygyny. The attitudes concerning contraceptive use of the immediate social environment, i.e., family and partner, is also transforming. Other factors help understand why fertility rate remained high compared to other ethnic groups

in Suriname. There is still a pronatalist culture, and certain reproductive rituals are still very crucial for especially Maroon women. Children are of value. The demand for children of the respondents point to the need for children mainly as offspring, support, and social security in old age. Social control, social influence, and cultural beliefs are essential in adhering to traditions. Respondents get help with the practice of postpartum rituals, while the family sees to it that postpartum abstinence also is followed. Respondents receive information about contraceptives and breastfeeding from medical professionals, friends, relatives, and others. The adverse side effects of contraceptives experienced by others also affect the contraceptive attitude of some respondents in the study.

The Maroon fertility in Suriname is higher compared to the other ethnic groups in the country. However, the changes towards lower levels indicates that the Maroons are in a process of demographic transition.

In line with the hypothesis, the study shows that the fall in the fertility level could be explained by factors such as urbanization, and other socio-demographic characteristics present in most of the populations that have experienced such transition. Sociodemographic changes among specifically the youngest women aged 15 to 19, and the fertility declines in the rural areas have contributed to this overall decline in fertility. The urban Maroon, although having the lowest fertility rates comparing to their rural counterparts, did not show significant changes between 2010 and 2018, showing as said, a TFR around 3 children per woman. As we do not have evidence from previous periods, we hypothesize that the fertility of the urban Maroon population may have experienced previous decline and it has already abandoned extremely high fertility rates. Their rural counterpart, however, is still in the process of fertility decline.

Furthermore, the results confirm the hypothesis that certain factors linked to the process of demographic transition were already present among the Maroon. Their demographic experiences in 17th until early 20th centuries suggest that some of these factors, whether or not intended to inhibit fertility were important. They are: high and frequent divorces, initiate relationships and divorces, the possibility of remarriage multiple times, had relative independence being the founder and ancestor of the matrilineal system, being the

provider of food for their families, raising their children as single parents, and living separate from their husbands.

Also, the hypothesized association of high fertility level and reproductive preferences and values is valid. Compared to the other ethnic groups in Suriname, female Maroons maintain a relatively high fertility rate because of their reproductive preferences and values. Beliefs and customs suggest that Maroons value fertility. They are extremely cautious with pregnancies. Maroons attach value to children. None of the respondents said that children are a burden. Maroon women also have a social environment that encourages and safeguards reproductive values. Despite urbanization and educational improvements, Maroon women maintain their postpartum traditions.

The study shows that young Maroon women have not increased their practice of contraception, although there is, indeed a significant drop in adolescent fertility; complementary, fertility at older ages are high. These three features would explain why overall fertility remains relatively high.

On the other hand, the study contradicts the hypothesis that if female Maroons have used more contraception, their fertility rate remains relatively high because the methods used may be ineffective or ineffectively applied. The results of the study show that awareness and access to contraception are universal. Despite this universality, the study suggests that fear of side effects, not being fully aware of the proper functioning of the methods, and distrust can explain why they are cautious about using a contraceptive method. Many of the interviewed do not use contraceptive methods by the time of sexual initiation. The study reveal that Maroon women may use cultural fertility treatments when getting pregnant is difficult.

Finally, the results partly support the hypothesis that contraceptive methods may be used selectively, not to reduce the number of children, but for planning the moment and the partner with whom one wants to have children. First, at the start of the childbearing, most respondents in the study have unintended pregnancies showing that they do not plan to prevent pregnancy. On the other hand, women want to have children with the current partner and therefore do not use or stop using a contraceptive method. What the study

indicates is that women use contraception for other purposes than only birth control. All women have or had a wish for children. Maroon culture also values fertility. This attitude was manifested in the interviews, and as such, it explains why they are hesitant to practice fertility control.

This study applies some determinants of Easterlin's framework to the fertility behavior of the Maroons in Suriname. In fact, modernization does influence fertility regulation and fertility. The results suggest that factors like culture, religion, and social environment are influential factors in the context of the Maroon population. Another point is that Easterlin's framework focusses on fertility regulation that leads to a fall in fertility. However, the study indicates that Maroon women are knowledgeable about or have used cultural methods to enhance fertility.

Modernization did not result in ending or diminishing traditions. It may, however, have reduced the duration of certain practices. Furthermore, the study concludes the prescribed stages of the demographic transition model cannot be applied to Maroon societies. Also, specific demographic characteristics were already present before the Western countries had experienced certain of these features regarding the demographic transitions.

The study shows the importance of not only using quantitative research. Conducting qualitative research contributes to a better understanding of survey results, including trends, levels, and changes. As such, qualitative research can have significance in understanding the motivations and behavior of individuals concerning broader patterns. Thus, qualitative research is needed to understand demographic behavior better and give thorough evidence for effective policy and other relevant programs and projects.

Summarizing, the conjunction of both analyses quantitative and qualitative depict that the Maroon fertility is effectively in a demographic transition, motivated by the series of factors that the literature has widely recognized. The decline was initiated by the urban population, followed afterwards by the rural population, whose downward trend seems to be still on course. Urban fertility decline, however, stopped in the most recent period thus indicating that the Maroon may not reach replacement rates, remaining at moderate level. This prospective view is based on the qualitative evidence. On the one side, it is true that factors that contribute to inhibit fertility (both distal and proximate) are indeed aspect of the most relevance for the interviewed women in urban Paramaribo. On the other side, it is true also, that they maintain high respect toward cultural attitudes that propitiate fertility and fecundability. This two-faced scenario explains the intermediary fertility level that the Maroon population has and suggests that it may have plateaued and, ceteris paribus can remain at not high, not low levels, with a TFR around 3,0 perhaps, due to the importance of the traditional attitudes towards reproductive behavior.

6.2 Recommendations

A follow up should be developed for a larger sample in the population, including the Maroons in the interior. This dissertation indicates that the rural areas are also experiencing declines in their fertility levels. As discussed in chapter 2, Maroons in the interior have experienced socio-economic development, which may have an impact on their fertility behavior.

Additional qualitative research among both male and female Maroons will add to a fuller understanding of the process of demographic transition experienced by this population. As is discussed in the chapters 2 and 4, Maroon men may have different attitudes and behavior related to fertility. For instance, most partners of the respondents in the study have children in other relationships, and the numbers of children are higher than their current female partners. The MICS 2018 round has already included a male module, so quantitative data is available. Males may have different reproductive behavior and other factors that influence changes in their lifestyles. From the men's perspective, the demographic transition may be explained differently.

Research is also necessary about the use and effectiveness of cultural treatments concerning stimulating and preventing pregnancies among the Maroons, as discussed in Section 4.3.4.

Future research could address the fertility transition of the other main ethnic groups in Suriname (as discussed in section 1.5). All ethnic groups have different fertility levels with evidence of different transition paths. Thus, they may have variations in determinants that can explain these differences in fertility level. The MICS data show that the TFR is above replacement level for all ethnic groups, although some are nearing the replacement level. For some ethnic groups, the TFR has even increased between 2010 and 2018. The research could look at factors contributing to the TFR level. Hence, this will also give a comprehensive understanding of the national fertility transition of Suriname. It will be important to find out whether different determinants of these diverse population groups can explain the stable fertility level of Suriname.

The study indicates that the early demographic experience of Suriname in general, and the Maroon population in particular, is significantly different from the European one. Further research needs to be conducted about the demographic development of Suriname during the colonial/slavery period in the 17th to 19th centuries (as discussed in section 2.3.1.9).

Related to the previous recommendation, also, further research about the demographic evolution of the Maroon societies in the 17th to 19th centuries (as mentioned in sections 2.3.1) is necessary.

Adjustments of the variables in surveys and censuses in Suriname related to marital status are also necessary. The literature and the study indicate that Maroons have traditional marriages even though other types of marriages are also practiced. Surinamese law still does not acknowledge traditional marriages that they are not included in the official statistics. Somehow it fails to collect the national data on marital and union status. It does not reflect the real situation of Maroons' marital status. Suriname reports present quite peculiar percentages of marital status characterization[48]. The data is inaccurate because of inadequate questions to accurately catch the whole range of marital arrangements.

The MICS data show that the percentage of Maroon women who reported 'living with a man' is remarkably high, as previously discussed. (as discussed in section 4.2.1, sociodemographic characteristics of Maroon women). Thus, it is of importance to include "other types of unions/marriages" when marital or union status are researched in surveys and the Census in Suriname. This recommendation will also accommodate the church marriages of the other ethnic groups of Suriname. Traditional marriage, common among

[48] According to a number of reports, Suriname has a large group of unmarried persons due to the type of definition used to classify marital status. It must be noted that the several ethnic groups also have differences in culture. Marriage is an institution with different norms and regulations among the ethnic groups and vast majority are legitimately recognized in each community. In 1930 for instance, 98% of children of the Hindustani and Javanese populations were reported as 'illegitimate'. Governor Kielstra changed the marriage law in 1940 to include the marriage ceremonies of these ethnic groups. Hence, the statistics on marital status and legitimate children changed. Still, there are other ethnic groups in Suriname whose marriage ceremonies are not acknowledged by law. These ethnic groups include the Amerindians and the Maroons (Schalkwijk, J.M.W and Ritfeld, E.J, 2016, p. 185 + 193, in Menke, J (ed.), 2016).

the Maroon communities, is also a marriage since the whole population embraces it as such and it is clearly institutionally legitimated. How can Census data show that above 90 percent of Maroon women are not married and being aware of the existence of this form of marriage?

On the other hand, surveys asked questions about husbands having more wives. Polygyny is also not acknowledged by the Suriname law, but this question is still requested. And surveys also report on child marriage in Suriname. Once the custom about the maturity initiation at age 16 is understood, the age of marriage is acceptable for the ethnic group.

The categories ‘not living with a man’ in the variable union status in surveys does not necessarily mean that the respondent does not have a partner. Maroons may live separately from their partners or live in a situation where, apart from polygyny, the man works somewhere and returns home now and then (see section 2.3.3.2.3). It is, therefore, essential to inquire further when asking this question. This variable is like the marital status variable, as mentioned above. Statistics on marriages and other unions are essential in research and planning purposes and need to be reformulated.

Another important characteristic is religion. The traditional religion of the Maroons has no name and is not named ‘Winti,’ as survey and census data results often indicate. Winti is the Afro-Surinamese Creole religion. In the field, the researcher experienced that Maroons do not have a specific name for their religion. During the interviews, some respondents did not see their traditional religion as a religion. Upon further questioning, these respondents said that they are confessing the religion of their ancestors, which, plays an important role in couple’s reproductive behavior.

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APPENDIX A - Tables

Table 1. 8 - Age-specific fertility rates and Total Fertility rate by Ethnic group in Suriname, 2004

Age-specific fertility rates and Total Fertility rate by Ethnic group Ethnic group in 2004							
Age groups	**Maroon**	**Creole**	**Hindustani**	**Javanese**	**Mixed**	**Other and Unknown**	**Total**
15-19	126.6	60.3	35.1	51.3	48.8	114.3	69.8
20-24	204	106.9	97.6	109.1	102.9	143.4	126
25-29	186.2	105.6	115.6	116.1	105.8	148.5	127.6
30-34	175.9	88.7	65.2	92.9	94.4	116.2	97.7
35-39	139.8	62.9	30.6	45.6	51.4	79.8	58.8
40-44	53.1	26	10.7	13.8	25.2	54.1	24.6
45-49	8.8	0.8	0.5	1.4	1.6	1.4	1.8
Total (TFR)	4.5	2.3	1.8	2.2	2.2	3.3	2.5

Source: Sno, 2011. Table 2: Leeftijdsspecifieke geboortecijfers en totaal vruchtbaarheidscijfer per etnische groep, p.2

Table 1. 9 - Mean parity by Ethnic group in Suriname, 2004

Mean parity by Ethnic group, 2004							
Age groups	**Maroon**	**Creole**	**Hindustani**	**Javanese**	**Mixed**	**Other and Unknown**	**Total**
15-19	0.35	0.18	0.1	0.14	0.14	0.43	0.21
20-24	1.32	0.61	0.52	0.6	0.59	0.93	0.75
25-29	2.4	1.12	1.32	1.18	1.19	1.49	1.43
30-34	3.59	1.89	1.97	1.86	1.84	2.62	2.22
35-39	4.76	2.42	2.36	2.3	2.29	3.18	2.72
40-44	5.45	2.71	2.71	2.59	2.6	3.39	3.03
45-49	5.79	3.06	3.15	3.17	2.77	4.09	3.48

Source: Sno, (2011). Table 3: Cumulatieve Fertiliteit per Etnische groep, p.3

Table 4. 9 - Percentage of Maroon women who had given birth by age, 2010 and 2018

Age group	2010	2018
15-19	25.6	14.5
20-24	71.9	65.3
25-29	87.8	83.9
30-34	93.2	94.7
35-39	94.2	96.2
40-44	96.1	94.8
45-49	96.8	94.6

Source: Data set UNICEF. (2019). Multiple Indicator Cluster Surveys Suriname. (MICS6) and UNICEF (2010). MICS4. Available from http://mics.unicef.org/surveys