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Why is Uganda experiencing a stall in fertility decline and what implications does the high desired fertility have for the fertility transition?

- A case study of Uganda as a deviant case of the Demographic Transition Theory

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Abstract

WHO The World Health Organisation (WHO) recognises that demographic trends play an essential role in the overall development of a country and improvements in economic, social and health conditions. One of the grand theories of population studies is the Demographic Transition Theory, a linear and universal model of population change. The greatest challenge to the Demographic Transition Theory's descriptive validity has been from the Sub-Saharan African region. However, recent evidence from Demographic Health Surveys has shown a consistent pattern of fertility decline across all countries in Sub-Saharan Africa in all countries except one — Uganda.

By analysing Uganda as the critical case of the Demographic Transition Theory (hereafter DTT), this study aims to answer the questions: Why is Uganda experiencing a stall in fertility decline and what implication does the high desired fertility have for the fertility transition? Further, the intent of this thesis is to explore the knowledge generated so far on this particular case, as well as to find contradictions and gaps in current research. The aim is not to find clear and definite answers to why Uganda is not following the assumed pattern.

The DDT will be used as a foundation from which this thesis will locate and analyze knowledge and research gaps. Since this study assumes that the model is insufficient in explaining the case of Uganda, a set of middle-range theories will be used to link reproductive behaviour to more defined aspects of social life. The goal in this research is not to establish theoretical generalisability across other countries or regions, but to generate internal validity in the case of Uganda.

This literature review has proven that utilising the same statistical data often results in varied findings and conclusions. Therefore, the intent to contribute to the perspective of both explanatory background variables, as well as proximate determinants, should be used when studying fertility behaviour. While demography may be quantitative in its nature, qualitative studies on the subject are needed.

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Keywords

The Demographic Theory

Fertility

Reproductive behaviour

Desired fertility

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1. Introduction

World Population Prospects is the most influential forecast of the future of global population trends, published by the United Nations (UN). The assumptions put forth by the UN are that Africa will reach near-replacement levels in fertility by the second half of the century (UN, 2013). The Demographic Transition Theory explicitly links fertility and mortality. However, because the total fertility rate remains stubbornly high in Sub-Saharan Africa, the grand theory has been questioned and different factors have been found to influence fertility. Additionally, it has been noted that each factor may vary depending on the setting and context. Yet, evidence from Demographic Health Surveys (DHS) from 1988 into the twenty-first century, shows a consistent decline in fertility in all countries surveyed, all countries except -Uganda.

This study aims to create an understanding of why Uganda seems to be a deviant case of the Demographic Transition Theory and what implications high desired fertility could have for the fertility transition. This is done through a qualitative review of the literature about the demographic transition, desired fertility, and the case of Uganda. The data is analysed through thematic analysis to help in the understanding of the complex concepts surrounding reproductive behaviour.

1.1 Motivation

Kenya, Uganda's eastern neighbour, has had a rapid decline in fertility and has been the subject of many studies. The relative absence of such fertility decline in Uganda, has not attracted the same level of attention. Research studies that have covered Uganda have usually been multi-country reviews focused on specific factors associated to fertility and comparative trends (Blacker et al, 2005). This research will be a qualitative single case study aimed to understand why Uganda is a deviant case of the demographic transition theory in East-Africa. Most research focused on demography and population in Sub-Saharan Africa is based on socio-economic perspectives; however, the role of culture remains strong in explanations of fertility and seems to be no less important in Sub-Saharan Africa (Gould, 2015, p. 248). Reproductive behaviours are closely related to cultural variables, such as local choice and norms. Hence, it may counter the universal socio-economic variables which are the traditionally described as background determinants, based on past transitions in the Western world. Therefore a set of middle-range theories that attempt to explain a more defined aspect

of social life, are used to make reproductive behaviour a more concrete phenomena. These other variables may explain why there is still a general preference for larger families in Uganda and some other parts of Sub-Saharan Africa (Gould, 2015, p. 127-128). However, previous research focused on cultural factors remains limited and scarce, which is not surprising since it is difficult to measure culture and find clear, associated variables to analyse. This research does not aim to find clear and definitive answers to why Uganda is not following the same patterns, but rather assess what have been said and found in previous research.

The WHO recognises that demographic trends play an essential role in country-level development and progressions in economic, social and health conditions. High fertility and rapid population growth are likely to create difficulties "[...]to eradicate poverty and inequality, combat hunger and malnutrition, invest in education and health, improve access to basic services, plan and develop cities, protect local ecosystem and promote peaceful and inclusive societies[..] " (WHO, 2015, p. 18). It is predicted that, especially in Africa, rising numbers of women of reproductive age and high fertility rates will have substantial implications for the achievement of the Sustainable Development Goals (SDG's) targets of ending preventable maternal and child mortality. This goal is also critical to reduce fertility and accelerating demographic transition. Investments in reproductive health and family planning are needed to ensure that women and men can reach their desired family size (Ibid, p. 19).

1.2 Research Questions

Why is Uganda experiencing a stall in fertility decline and what implications does the high desired fertility have for the fertility transition?

- A case study of Uganda as the deviant case of the Demographic Transition Theory

This research question seeks to identify what has been said and done in previous research that explains why fertility remains high in Uganda in comparison to neighbouring countries and specifically,, why *desired* fertility remains high. The question aims to be explanatory in nature to further explore the unique case of Uganda. Uganda's experience will fertility and population growth will be used as a critical and deviant case from the well-developed grand theory of the DDT. A set of middle-range theories, attempting to bring a more clear and defined aspect of social life than the abstract grand theory, will be used to

better understand some of the factors that might be at play in Uganda. The questions were formulated to have a clear focus while striving to be open-ended and not too narrow (Bryman, 2016, p. 62 & 83). The research question does not have the ambition to speculate on future transitions, but strives to explore what has been found on the case in previous research.

1.3 Structure of the Thesis

As secondary sources are used as the collected data in this study, there will be no separate section for previous research in this thesis. Previous research is integrated in the background and theoretical framework. Empirical data of the specific case is discussed in the data analysis.

2. Background

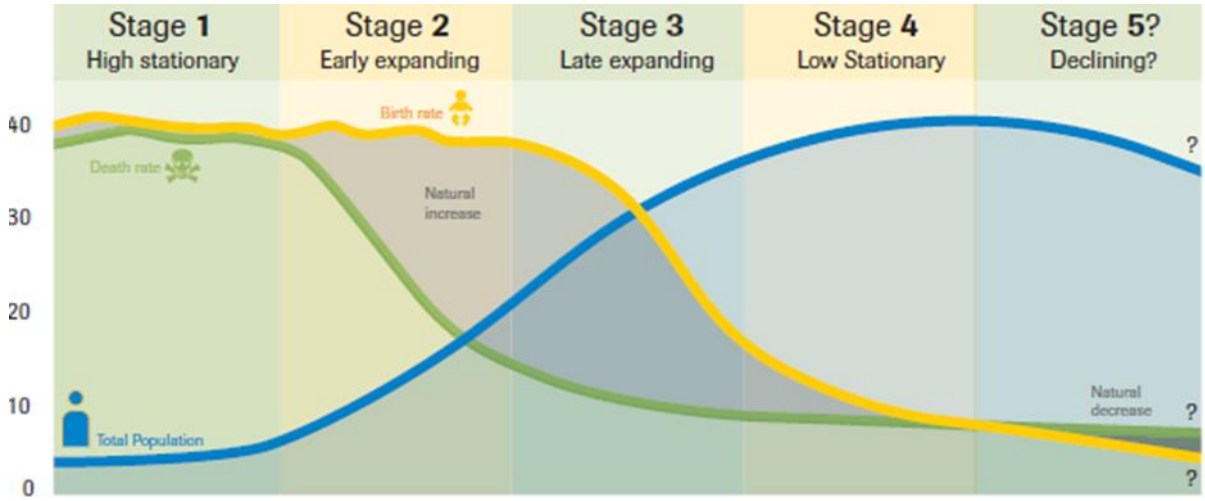
2.1 Demographic Transition Theory/Model

The DDT is one of the grand theories of population studies and population change. Implicit in this theory is the assumption that there is a universal linear model of population change, which is driven by development (Gould, 2015, p. 65). Although it is an empirical generalisation, more than a casual and abstract conceptualisation, it can assist in identifying broad trends and relationships in population change across time and space. However, the theory on its own is not able to explain how and why population change proceeds (Ibid, p. 70). The theory assumes a linear universal model where all countries are following roughly the same stages of population change, based on the conceptualisation of development as modernisation. This assumes there is an inevitable progression towards a “modern” society (Hewitt & Smyth, 2000, p. 128) (Gould, 2015, p. 78).

The model is divided into four chronological phases:

- High equilibrium period (balance) at very low population growth. High levels of mortality, with a life expectancy of between 30 and 35 years, and high constant fertility at a Total Fertility Rate (TFR) around five children per woman.
- Early expanding phase where there is an acceleration of natural population growth as mortality falls, but fertility remains high. Life expectancy at birth rises to over 55 years. The growth rate may exceed 2 % per year.

- Late expanding phase where population is still growing but the rate of growth begins to fall. The decline in mortality continues but is stalling. This period is characterised by rapid fertility decline, where the gap between mortality and fertility is narrowed progressively.
- Low equilibrium period. Mortality continues to fall slowly and life expectancy rises to over 75 years. TFR is around 2, which is just about replacement level (Gould, 2015, p. 70 & 71).



Populationeducation.org (2019)

The essential logic of this model is based on the relationship between mortality and fertility. For instance, if a family has a desired fertility of four children but there is a high infant mortality, then seven births may be needed to reach the desired family size. But when the prospects for childhood survival improves, they may only have five births to ensure that four children will grow up to adulthood. This assumes that the desired number of children can be deliberately planned. Gould explains that the factors responsible for fertility and mortality are primarily structural and beyond the control of the individuals. In contrast, he sees fertility as being about human behaviour and cultural choice. Social institutions (such as age at marriage and education) may be the link between the structural and economic conditions in society which affect fertility, and simultaneously also affect the factors for mortality decline (Gould, 2015, p. 81). Gould claims that the essential validity of the DTT is central to the work and the policies of the United Nations, United Nation Population Found (UNFPA), The World Bank and other international bodies. The projections for the UN are for the TFR to be near-replacement level by 2050 (Ibid, p. 248).

2.2 The Second Demographic Transition

As seen in the diagram above, the fifth phase is a speculative prognosis of the future. In the global North, The Second Demographic Transition (SDT) has emerged and is rooted in principal propositions that differs from the original DTT. In the SDT, there is no longer a necessary relationship between mortality and fertility. Rather than being controlled by biology and cultural norms, there is universal contraception and childbearing is a matter of deliberate choice for individuals or couples (Gould, 2015, p. 121 & 131).

2.3 Sub-Saharan Africa

The greatest doubts about the DTT's descriptive validity have been rooted in the Sub-Saharan African experience. Mortality and fertility in the pre-colonial times were very high with slow, or even negative, population growth. The first decades of the twentieth century brought a period wrought with ecological disasters (droughts and devastating diseases) which resulted in overall population decline. From the 1920's, mortality began to fall with the development of "western" medicine, therapies and vaccinations; this happened slowly at first and then more rapidly in the second half of the century. Many parts of Africa experienced rising fertility in the 1960's and 1970's. This was a time of relative prosperity with better nutrition, health care and social changes. In Kenya for example, TFR rose from an estimated 5.0 in the 1950's to 8.0 by 1985. Many scholars argued that Sub-Saharan Africa was fundamentally different from other regions and that it would not follow into the later phases of the transition. They postulated that fertility decline was unlikely where land inheritance arrangements and social relations meant that large families were socially desirable, and children prized (Gould, 2015, p. 75).

However, as evidence from DHS, from 1988 into the twenty-first century shows, a consistent decline in Sub-Saharan African fertility in all countries surveyed, except one, Uganda (Kirk, 1996, p. 381). Large declines were experienced in wealthier African countries with fairly well-developed programmes of reproductive health and health systems, but declines were also experienced in the poorest and less developed countries (Gould, 2015, p. 75). There is a consistent pattern of fertility decline across Sub-Saharan Africa as a whole,

with an average decline of one child per woman from the 1980's to 2005. Outstanding exceptions are Niger, and Uganda (Ibid, p. 120).

Bongaarts and Casterline identify a few key differences in reproductive trends and patterns between Africa and other parts of the world. First, the pace of fertility decline was substantially slower than the pace of decline in Asia and Latin America during the 1970's. It appears that several African countries in the fertility transition have stalled at a TFR near 5. Second, birth intervals are longer in Africa, the main reason being postpartum behaviours (such as abstinence from sex and high levels of breastfeeding). Third, the ideal family size in Africa is higher while the African continent has a higher unmet need for family planning and contraception solutions than other regions. Another difference is that Sub-Saharan African fertility is slightly lower in the intermediate ages, and slightly higher at younger and older ages (Bongaarts & Casterline, 2013).

2.4 East Africa

The four countries belonging to the East African Community (EAC), Kenya, Tanzania, Uganda and Rwanda, are different in many ways. What they have in common is that much of their populations are still rural dwellers and they have generally low scores on the UNDP Human Development Index (UNDP, 2013). Kenya differs from the others in that it has a higher Gross National Product (GNP) per capita and a more diverse economy, as well as a population with higher education. Tanzania seem to be the country with highest equality among the four, while Rwanda has the highest population density in all of Africa (Muhoza et al, 2014, p. 1 & 2).

Family planning programs has varied across the region, with Kenya as the earliest implementer due to strong support from the government. The family planning effort in Tanzania has been focused on spacing births to improve maternal and child health. In Uganda, there has been little governmental support and commitment to family planning activities, and the first national programmes were adopted in 1995. In Rwanda, a family planning policy was adopted in 1990 and was aimed at restraining population growth. After the genocide in 1994, the policy changed and focused on rebuilding dislocated families and improving the quality of life (Muhoza et al, 2014, p. 2). The prevalence of contraceptives is modest in all four countries with the highest prevalence in Rwanda (51.6%) and Kenya (45.5%) and lower in Tanzania (34.4%) and Uganda (30.0%) (Ibid, p. 2).

There is substantial variation in fertility decline among countries within the region, as the considerable variation across each country. Sub-Saharan Africa's transitions are on average much slower than past transitions elsewhere. A clear exception in Sub-Saharan Africa is Rwanda, which has experienced an exceptionally rapid decline in fertility between 2005 and 2010. During those five years, contraceptive use more than doubled and unmet family planning needs declined by nearly half. Bongaarts and Casterline see a plausible explanation for the rise in demand and the increased impact of family planning programs as a combination of two factors. First, the rapid socioeconomic change and declining infant and child mortality since the early 2000's, the period following the civil war and political instability. Second, Rwanda had, and still has, well-funded and active family planning programs which provide information and educational messages countrywide (Bongaarts & Casterline, 2013, p. 165).

Kenya's rapid fertility decline has been the subject of much discussion. Between the mid-1970 and the mid-1990, fertility in Kenya decreased from eight to five births per woman, a decline of about 40 percent. During the same period, fertility in Uganda declined less than 10 percent (Blacker et al, 2005, p. 357).

2.5 Uganda

During Uganda's catastrophic years in the 1970's, it is hard, if not to say impossible, to determine whether or not fertility decreased. In 1971, Idi Amin took power in Uganda, and the following eight years were a time of violence, misrule, social and economic disorder. Doctors, teachers, engineers and other professionals fled the country, either for better opportunities or in fear for their lives. The infrastructure of the country fell apart and the recently growing economy collapsed entirely. The Asian minorities who played an important role in the Ugandan economy were deported. Amin was overthrown in 1979 and the country suffered from unstable governments and internal conflicts thereafter.. (Blacker et al, 2005, p. 365)

In 1986, Uganda celebrated the cessation of a civil conflict which lasted five years. The conflict ravaged the entire country, from the south to the north where the Lord's Resistance Army abducted children and terrorised communities. Around the same time, Uganda was highly affected by the HIV/AIDS epidemic (Skolnik, 2016, p. 396). Life expectancy had risen from 40 in the early 1950's to 52 in the late 1980's, but in the following ten years it fell to less than 45, largely due to HIV/AIDS. This affected not only mortality

levels, but the entire national development experience. It lowered productivity of workers, decreased incentives for saving and discouraged investment from abroad (Secondi, 2008, p. 208).

More than a third of the Ugandan population lived below the international extreme poverty line in 2013 (WB, 2016, p. 3). Although that marks some progress, reports show there is high national vulnerability: for every three people that were lifted out of poverty, two fell back into the cycle. This vulnerability makes it difficult to sustain gains in welfare (WB, 2016, p. 6 & 22). The access to electricity is one of the lowest in the world; however, there have been rapid improvements in access to water sources (WB, 2016, p. 4).

Enrolment in primary school was 86% in 2013. Despite high levels of enrolment, the completion of primary education has fallen since the beginning of the 2000's. In 2011, the rate of drop-out from primary school was 53% (WB, 2016, p. 35). Universal Secondary Education (USE) was implemented by the Ugandan government in 2007, and like the Universal Primary Education (UPE), is tuition free. Yet, the costs of boarding, uniforms, school-material and food continue to pose insurmountable barriers for many families. Another reason for low school attendance rates is sickness and calamity. For girls, one of the main reasons for dropping out is early marriage and pregnancy. One in four girls in Uganda are either pregnant or have given birth before the age of nineteen (MoH Uganda, 2014, p. 8). The gender gap in enrolments in schools has closed, as well some of the literacy gaps (WB, 2016, p. 34-37). The access to education has improved, yet quality remains an issue. In the poorest regions of the country, there is one teacher in a class of 58 pupils. Teachers are also more likely to be absent in poorer areas, with an absenteeism of four in 10 teachers and only 10.5% of classrooms have electricity (WB, 2016, p. 111 & 112).

The Ugandan National Health System involve the public and private sector with the government running 54% of all health facilities. The ratio of health care workers to the population remains low with a ratio of doctors of 1:24,000, midwives 1:9000 and nurses 1:1,700 (MoH Uganda, 2014, p. 11 & 12). It has been proven that the quality of healthcare services are much poor in rural, low-income geographies. The accuracy of diagnostics is lower and the absenteeism of health workers is 42% in such areas. Despite the quality being low, poorer communities are more likely to be satisfied with the healthcare services. This could create a problem of accountability from service providers (WB, 2016, p. 113 & 117).

In comparison to Kenya, who was the first country to implement a population policy in 1967 through the National Family Planning Programme, Uganda was a late adopter. In 1995, the Ugandan government adopted the National Population Policy for Sustained Development. Before this, family planning efforts had been through non-governmental organisations which were excluded from nationwide service delivery and also focused on urban areas, thereby excluding rural areas from receiving much-needed services.. In the beginning, family planning services were only offered to married women accompanied by their husbands; the services were banned for unmarried and adolescents. After the International Conference on Population and Development (ICPD) in Cairo 1994, the Ugandan government started to promote family planning as a part of the new policy of reproductive health through the Ministry of Health and family planning services were introduced nationwide, at all clinics run by the ministry (Blacker et al, 2005, p. 367-368).

The majority of Uganda's funding within the health sector comes from donor organisations. Donor organisations provides between 50-70% of the Ministry of Health's budget for services and drugs, creating a great dependence of foreign aid in the field (MoH Uganda, 2014, p. 15).

2.6 The Global Gag-Rule

The global gag rule has caused large fluctuations in funding for family planning from the United States. Especially in Sub-Saharan Africa, there have been disruptions in the delivery of services due to the restrictions on foreign aid from the U.S. At the International Conference on Population in Mexico City 1984, a landscape-altering announcement was made: any international NGO that performed or promoted abortions would be prohibited from receiving further funding, technical assistance, or supplies from the U.S. The policy even prevented NGOs to use their own funding for delivering these services, if they wanted continued support from the US (Meulen Rodgers, 2018, p. 1 & 2). The largest recipient of family planning assistance since 2008 has been Sub-Saharan Africa, receiving 30-43% of the funding from the U.S. (Ibid, p. 9). Funding cuts have resulted in clinics closing down and reduced contraceptive supplies, which also affected other health services such as pre- and postnatal care, infant and child healthcare, immunisation services, cancer screening, malaria treatments and screening for sexually transmitted infections, including HIV (Ibid, p. 17).

Commitments have been made by other donors, such as the Department for International Development (DFID), Canada, Sweden and Norway to provide more family planning funds. Unfortunately, even the second-largest bilateral donor, DFID, cannot match the past contributions from the U.S. (Ippf.org, 2019). The implications of US. President Trump's extension of the Global Gag-rule may not yet have shown demographic consequences. However, past fluctuations in funding have directly impacted not only abortion access, but also other Sexual and Reproductive Health and Rights (SRHR) service deliveries.

3. Theoretical & Conceptual Framework

In this research, DTT is used as a background theory to identify a starting point of the research problem, to give structure and to guide the research. Gould (2015) argues that DTT is not a theoretical model based on abstract and conceptual logic but rather an empirical generalisation (Gould, 2015, p. 71). According to Merton (1967), grand theories are likely to be abstractions, making them hard to make significant links to the real world (Bryman, 2016, p. 18). Since the starting point of the research assumes that this model is insufficient in explaining the case of Uganda, middle-range theories at a lower level of abstraction, will be used to link the research question to clearer, and more defined, levels of social systems (Ibid, p. 18). The middle-range theories used in this study will be MacDonald (1997) of gender equity in fertility transitions, Pritchett (1994) with the emphasis on fertility preferences, and Demeny (2003) with focus on population policies. Respect should be given to the challenging complexity when studying fertility since it involves the issues of gender systems. Until recently there has been a lack of the centrality of gender systems in transition theory, despite the logical importance (MacDonald, 2000, p. 428).

The goal in this research is not to find clear and definite answers to why Uganda is a deviant case. Neither is the goal to find ways to predict nor to control the phenomenon. Thus, the intent of the research is to explore previous research on the matter and create further understanding for the case of Uganda in fertility transition.

4. Conceptualising Fertility

4.1 Fertility

Much of the academic interest has been in the measurement of fertility and its correlates. There has been a conceptual shift between the emphasis on explanatory background variables affecting fertility (such as education, income, urbanisation) towards emphasising the proximate determinants of fertility, such intermediate biological and cultural factors affecting conception. Biological factors, such as pathological sterility due to untreated Sexually Transmitted Infections (STIs), are the highest in Middle Africa (Cameroun, Central African Republic and Uganda). Uganda's high level of primary infertility is causing high prevalence of childlessness among women. Lately there has been a reduction in sterility, meaning there is also a rise in fertility (Blacker et al, 2005, p. 360).

A large-scale problem is the one of unsafe abortion. Unsafe abortions are abortions performed by an untrained provider, using poor techniques, inappropriate equipment, and unhygienic conditions. The WHO estimates that 19 out of 22 million of unsafe abortions every year take place in low- and middle income countries. It is estimated that about 13% of the total maternal deaths are due to unsafe abortions yearly worldwide (Skolnik, 2016, p. 239) (WHO, 2005).

4.2 Total Fertility Rate

TFR is the number of live births a woman would have at the end of her reproductive years, if the prevailing age of specific fertility rates remained constant (Hewitt & Smyth, 2000, p. 126). Statistical data of TFR is most commonly based on surveys from World Fertility Surveys (WFS) and the Demographic Health Surveys (DHS) programs, which are based on women's responses to questions about reproductive behaviour and fertility preferences in household surveys. Based on these surveys, there are three indicators of fertility preferences. The first draws from the question about the ideal number of children. The second measure is the 'desired total fertility rate,' drawn from the question in DHS: "If you could go back to the time you did not have any children and could choose the exact number of children to have in your whole life, how many would that be?" In WFS, the same question is formulated: "If you could choose the exact number of children to have in your life, how many children would that be?" (Casterline & Agyei-Mensah, 2017). The third measure is

the question about women's future desired children, to classify births or current pregnancies as wanted or unwanted (Pritchett, 1994, p. 4). However, there are societal limitations to these questions, such as social stigmas about having children and gender roles, that impact respondents' answers.

4.3 Desired fertility

Scholars who are emphasising the role of desired fertility and its impact have the view that women and men's fertility choices and preferences are the primary determinants. Fertility preferences are conditional and constrained by the social, educational, economic and cultural conditions an individual or family unit faces. Accordingly, Pritchett views policies that improve conditions for women as the most sustainable way of reducing fertility and slowing population growth. Sample gender-focused policies include working toward raising income, increasing education and empowering women (Pritchett, 1994, p. 2).

Others consider the social and cultural variables and their roles in reproductive behaviour. This may mean norms and attitudes from society are influencing the value attached to children (Muhoza et al, 2014, p. 2). Nauck (2007), adds another dimension of desired fertility when accounting for the self-esteem children bring to the parents. He argues that parenthood creates a "close, intimate, emotional, life-long, bonded , and committed social relationship that contributes directly to self-validation and personal identity formation, and gives meaning and relevance to personality" (Nauck, 2007, p. 617).

Gunther and Harttgen (2016) conducted a more general study on desired fertility and number of children born across time and space. In their study, they find a close relationship between wanted and actual fertility. However, they also find that the level of unwanted births has stayed at two across African countries, while it has decreased from one to zero in developing countries in other regions. Hence, their conclusion is that women in African countries have less ability to translate their child preferences into birth outcomes than women in other developing countries and regions. They found that family planning efforts only partially explain the observed spatial and temporal differences in achieved desired fertility levels (Gunther & Harttgen, 2016, p. 55).

4.4 Contraception & the Unmet Need

Bongaarts and Casterline attempt to explain why the fertility transition is different in Sub-Saharan Africa. They argue that fertility preferences represent a link in the causation between fertility and its socio-economic determinants. They emphasise the unmet need of contraception and claim that high fertility is a symptom of low levels of social and economic development, as well as weak family planning programs, in Sub-Saharan Africa. The reasons why the ideal family size is higher, they suggest, is due to pronatalist features in African societies (Bongaarts & Casterline, 2013, p. 159, 161 & 166). Also, in their study from 2018, they point out the challenges of avoiding unplanned pregnancies over the full course of a reproductive career and that the incidence of unplanned pregnancy is high in societies in fertility transition (Ibid, p. 795).

To this argues Pritchett (1994), who views fertility preferences as the main factor for high fertility. He studied the impact of population policies and claims that the studies that emphasise the importance of provision of family planning services are typically based on analytical errors. He claims that women want more children in countries where fertility is high, and unwanted or excess fertility negligible role in explaining differences in fertility. Pritchett argues that "excess fertility is not systematically related to the level of fertility (that is, it is not higher for countries with higher fertility) (Ibid, p. 5). He states that "contraceptive use is higher where fertility is lower primarily because desired fertility is lower [...]" (Pritchett, 1994, p. 15). Pritchett sees to dominant views when discussing public policies, concerning fertility. One is the "family planning gap "view, where fertility is seen high due to inadequate contraception and inaccessibility or high host of services. The other view is the "desired family" view where high fertility essentially reflect desired births. However, fertility choices are seen as conditioned by economic, educational and cultural conditions faced by the men and women (Ibid, p. 2). Pritchett rather sees the challenge of reducing fertility as the challenge of reducing people's desired fertility. The key question he asks is instead: To what extent is desired fertility determined by economic influences and to what extent by cultural and social forces? (Ibid, 1994, p. 2 & 3).

5. Conceptualising Fertility Change

5.1 Proximate Variables

Studies which emphasises this type of explanation recognise that there is a series of economic, social and cultural factors which affect fertility. Between the fertility outcomes and these factors, there can be a number of variables which affect the rates of fertility directly in a given context. These variables can be: proportion of people married, contraceptive use, abortion prevalence and infertility post-birth. These variables provide a link between broad socio-economic factors and fertility. However, questions about the underlying causes remain (Hewitt & Smyth, 2000, p. 127).

5.2 Explanatory Background Variables

One of the background variables is education. Education weakens adherence to traditional beliefs. Schooling might also improve the capabilities and knowledge about how to meet contraceptive needs. Caldwell (1980) emphasises the role of mass-education in the demographic transitions; however, the importance of quality within education has not yet captured the attentions of scholars studying the relationship between schooling and fertility decline. . Poverty is another critical variable; populations which are highly affected by poverty are having many children as a strategy to improve their circumstances, better their fragile conditions, secure their future and escape poverty. Children can be a source of income, old-age insurance, a way of allowing diversification of income activities and minimisation of risks. Children can also be a supply and a symbol of social success, and to ensure the survival of a group and their lineage (Vimard, 2008, p. 17). Similarly, child mortality is an important variable in desired family size and the demand for contraception due to the mechanisms of insurance and replacements.

Religion have been found to have a higher impact on lower socio-economic groups while seeming absent among wealthier groups. However in Uganda, there seem to be a homogeneity between the religious groups, where Muslims desire 5.2 children and Christians desire 5.3 children (Muhoza et al, 2014, p. 5). Also, gender inequality and patriarchal structures, common in African societies, result in women having less decision-making power

and lower overall status resulting in fewer opportunities to impact the outcome of their reproductive health.

Residence plays a role in determining fertility as well. Urban settings offer their inhabitants more varied opportunities in labour and education, for example. Urban dwelling can also have an impact in terms of diversity and openness to new norms and ideas. Urban residence can also mean easier access to reproductive health facilities and services.

5.3 Socio-economic Development

The most dominant interpretation of fertility behaviour is the economic one. Here, structural socio-economic development is seen as leading to increased expecting costs of children, as well as weakened benefits. Within this view, fertility is portrayed as the result of a couples conscious decisions and rational choice (Muhoza et al, 2014, p. 2) (Bongaarts, 2008, p.).

The strict neoclassical models argue that increased levels of schooling for women leads to increased wages and increases in the opportunity costs of having a large number of children. As a result, women with higher education levels will shift from having a large quantity of children to having fewer, higher-quality children. Demographers have, over the years, moved away from that one theory explaining fertility decline, instead stressing the importance of multiple contextual factors, including changing economic opportunities and fertility preferences (Behrman, 2015, p. 790).

5.4 Gender Equity

The International Conference on Population and Development in 1994 emphasised the critical role of gender issues in the discussion of population and development. Higher levels of gender equity were identified as necessary components in achieving lower fertility levels (United Nations 1995). Mason defines the concept of the gender system as “the socially constructed expectations for male and female behaviour that are found (in variable form) in every known human society. A gender system’s expectations prescribe a division of labour and responsibilities between women and men and grant different rights and obligations to them” (Mason, 1997, p. 158 see MacDonald, 2000). Gender inequity within the family in high-fertility contexts may be experienced by women, but imposed by spousal, familial and societal expectations, such as the dissatisfaction with the hardship and dangers of constant

rounds of childbearing and rearing. MacDonald emphasises that in societies undergoing fertility transitions, gender roles and gender stratification in different social institutions can become inconsistent with each other (Ibid, p. 428). MacDonald criticises unidirectional dichotomous models (as high education, lower mortality and urbanisation leads to lower fertility levels) since they do not situate fertility within its cultural and institutional context (Ibid, p. 429).

5.5 Policy & Institutions

Population policy is defined by Demeny (2003) as: "deliberately constructed or modified institutional arrangements and/or specific programs through which governments influence, directly or indirectly, demographic change" (Demeny, 2003, p. 3). The key component which is affecting population changes is births produced by individual couples. He argues that household choices are greatly influenced by the surrounding local society, where the individuals and their kin group have a material stake. Individuals have rights over their own lives, but are influenced by biological and social constraints (Ibid, p. 4). Beginning in the 1950's, there were growing international debates and concerns about population growth, much of which stemmed from the West and the United States (Ibid, 2003, p. 11).

The emphasis on family planning as population policy has been heavy. The financial and administrative limitations of developing countries created involvement and heavy dependence on international assistance in family planning programs. After the Cairo conference, there was a shift from family planning programs to programs for reproductive health. These programs paid attention to the broader scale of the health needs of women, as well as empowerment, believing that this would reduce maternal and infant mortality, improve education for girls, and work opportunities for women and political participation (Demeny, 2003, p. 15).

Four components had been seen as essential in past fertility transitions: (1) the direct cost of child-rearing (2) the opportunity cost of children to parents, which means the profits a couple must abstain because of children (3) the children's contribution to the earnings of the family through labour (4) children as a source of security to parents in old age (Demeny, 2003, p. 12). Based on these components, a policy to reduce fertility should create following:

- Financial responsibility for parents to raise their children, including education and health care.

- Income-earning opportunities for women, as well as jobs not easily compatible with childbearing and child rearing.
- Formal education by social institutions with compulsory attendance.
- Illegal child labour.
- Legal guarantees of contracts and property rights. Development of pension schemes and insurance (Demeny, 2003, p. 12).

In the same way countries with below-replacement fertility have created policies to encourage the willingness to have children and ultimately, raise fertility. Countries have done this through the provision of subsidised day-care services, free education, and parental leave. (Demeny, 2003, p. 19) (Kirk, 1996, p. 387).

MacDonald argues that gender stratification and gender roles within social institutions in a society can become inconsistent with each other in a society undergoing a fertility transition (MacDonald. 2000, p. 428). MacDonald claims that the fertility transition has been linked with improving gender equity in family-oriented social institutions, almost exclusively within the family itself. The fall in fertility is associated with women accessing rights within the family, which enables them to reduce the number of pregnancies and births to more of a desired level. This might be a slow process due to that the system of the family is closely linked to conservative institutions, such as religion (Ibid, p. 437).

Development Factors	**Proximate Determinants**
Income/Growth	Proportion of married
Urbanisation	Intercourse frequency
Education	Post-partum abstinence
Improved Health Services	Lactational Amenorrhea
	Contraception use

	Spontaneous intra-uterine abortions
	Induced abortions
	Natural sterility
	Pathological sterility

6. Method & Data

This qualitative literature review and case study aim to provide a holistic in-depth examination and understanding of the critical and unique case of Uganda through a combination of both explanatory and descriptive research questions. The goal is to reveal the unique features in the case of fertility decline, or the lack thereof, in Uganda. The goal in this research is not to create theoretical generalisability across other regions or countries, but seeks to achieve internal validity (Bryman, 2016, p. 60-63) (De Vaus, 2001, p. 29 & 237). The research is conducted with an open-ended strategy, where theory might emerge from induction (Bryman, 2016, p. 23).

Using secondary material and previous studies, this research aims to look beyond the socio-economic perspectives on the demographic transition, and into the sociological complexities within the area of reproductive behaviour, fertility decline and desired fertility. Explanatory research focuses on ‘why’ and involves the development of casual explanations. A cause cannot be observed, but rather need to be inferred. However, inferences are fallible and therefor the risk of incorrect casual relationships must be minimised. To avoid invalid inferences is one of the fundamental purposes of research design in explanatory research. In this research, the casual thinking will be of probabilistic nature, rather than deterministic (De Vaus, 2001, p. 3-5).

6.1 Data Collection

Secondary data in the form of literature and articles on the theory of the Demographic Transition Theory, desired fertility and the case of Uganda and neighbouring countries will be used. This literature have used DHS and WFS to provide statistical data. The secondary analysis of other research will allow more time for analysis and interpretation of data. Re-analysis of secondary data will also give the chance of new interpretations not yet developed (Bryman, 2016, p. 309-312). The limitations of using existing literature can be both methodological and interpretation difficulties. These is a risk of forcing the data, collected by someone else, into a different theoretical and analytical to answer the own research question in mind. Hence, secondary analysis needs to be followed by conscious considerations of the material in the light of the designed research (Punch, 2014, p. 245).

6.2 Data Analysis

The methods for analysing case studies are less systematically developed and predetermined than data analysis for other types of research (De Vaus, 2001, p. 249). In this research thematic analysis will be used to analyse the qualitative data collected. Through thematic analysis, key themes will be identified and extracted from the data as a form of coding. The interpretation of data is a process of making sense of the data and link it to the research question (Bryman, 2016, p. 11 & 697). Thematic analysis will provide a process with stages of familiarisation, conceptualisation and abstraction of the data (Bryman, 2016, p. 588).

Through an approach of constructivism, the researcher wish to understand the social reality and the ongoing accomplishments of social actors, rather than something external and constraining. The perspective of constructivism will also help to understand categories as social constructions, built up under interactions (Bryman, 2016, p. 30).

7. Analysis

In Uganda, the TFR ranged between eight in the 1970's to six in the 2010. Year 2014, the TRF had declined to 5.8 children per woman, still this was the tenth highest in the world (Ariho et al, 2018). Uganda's persistently high TFR could partly be attributed due to strong preferences for large family sizes (Matovu et al, 2017). Studies have found fertility changes to

be associated with changes in demographic, socio-economic and cultural factors (Ariho et al, 2018). When the fertility decline starts, within the DDT, it appears to be a matter of time before it spreads through society at different levels in a self-sustaining process. Whereas Kenya's fertility has followed that path and fertility has also declined among rural women and those without or with low education, Uganda shows less consistent trends. However, faster declines has been shown among the most educated, as well as urban women, even if not at the same levels (Ariho et al, 2018). Other immediate neighbours, such as Tanzania and Rwanda, who have has lower educational levels, has shown more pronounced declines in fertility than Uganda (Blacker et al, 2005). This indicates that it is about more than school attendance. It might imply that the UPE, implemented by the governments, is of poor quality. Or that the way the education is formed does not allow for information exchange and change in norms.

Through the literature review, an extensive emphasis on education has been found. Behrman (2015) studied the effect of schooling on women's desired fertility, using the implementation of Universal Primary Education (UPE) policies in Malawi, Ethiopia and Uganda. Her findings indicate that increased schooling reduced the ideal family size and the very high fertility among women across all three countries studied, but in varied extents. She found that schooling does not only reflect upon the actual educational level, but also through diffusion of new information, promotion of new norms, and exposure to new social networks and social interactions. Behrman uses the argument from Caldwell (1980) where he claims that mass schooling initiates a fertility transition through a combination of ideational factors (preferences for smaller families) and economic factors (e.g. the high cost of children's schooling) (Behrman, 2015, p. 790) (Caldwell, 1980). Through her research, Behrman found that schooling had no significant effect on knowledge about ovulation, HIV transmission, or where to access condoms. Neither had schooling effect on women's participation in decision-making in the household or opinions on domestic violence. However, schooling did have positive effects of women's probability of reading a newspaper. In the study, it was found that one year of increased schooling decreased a woman's ideal family size by 0.43 (child per woman) in Malawi, 0.34 in Ethiopia, and 0.11 in Uganda, suggesting that schooling has much less impact in Uganda than the other two countries of comparison. Behrman's analysis indicates that increased schooling had a significant negative effect on the probability of women having very high desired fertility (six or more children). However, the ideal family size remained high (around four children) across all three countries and women exposed to UPE (Behrman, 2015, p. 802-804).

Matovu et al (2017) studied the determinants of fertility desire among married or cohabiting individuals in Rakai in Uganda, through a cross-sectional study. They confirm that Uganda continues to have persistently high TFR partly due to strong preferences for large family sizes. The study explores the factors influencing fertility desire among married or cohabiting individuals in Rakai, southwestern Uganda. Through a cross-sectional cluster randomised study, they found that 78.8% reported having three or more living children. On top of that, 68.5% of the interviewed individuals wanted to have a family size of five or more children. Only 30% reported that they had reached their intended number of children. The study found that being male and having primary education were positively associated with high fertility desire in this population. However, Matovu et al also found that the fertility desire did not differ between individuals without formal education and those with post-primary education (Matovu et al, 2017, p. 9). They claimed that in the district where their study was conducted, women sometimes saw child-bearing as a type of social protection. In the same context, fatherhood and marriage were parts of respectable norms (Matovu et al, 2017, p. 3).

Throughout the literature there is also an emphasis on family planning policies. Through a comparative study of trends and determinants between Kenya and Uganda, Blacker et al argues that the differences in fertility decline between the two countries is due to the different paths of economic development following independence, as well as Kenya's early adoption of family planning through health services. Kenya started to implement a national family planning policy 1967, which made them one of the early adopters, while the Ugandan government did not promote until 1995. Blacker et al claim that family planning programs have the greatest impact, followed by socio-economic factors, and that culture play a minimal role (Blacker et al, 2005). This raises the question if Uganda adopted a national family planning policy so late, that they still have not entered the real down-curve of fertility decline, as done by Kenya? Uganda's dependency on foreign aid and global political changes creates a vulnerable health sector, and even more exposed is the sector of reproductive health.

Ariho et al (2018) studied the determinants of change in fertility pattern among women in Uganda during the period 2006-2011. The result of their study showed significant differences in characteristics of women, and viewed this as the primary explanatory factor for the observed change in fertility. They found that changes in reproductive fertility behaviour did not contribute drastically, but instead changes in age, educational level, place of residence, wealth, polygyny, headship of households, exposure to family planning messages,

use of contraceptives, age at first sexual intercourse, family size preferences and age at first marriage, were the common reasons for change in fertility. The biggest contributor to fertility decline was education (47.8%), after that came age at first marriage (40.9%), followed by women's desired number of children (29.7%). Working status contributed with (23.8%), use of contraceptives (19.8%), exposure to messages of family planning (12.7%), place of residence (11.1%), age at first sex (8.7%), and lastly, polygyny (3.4%) (Ariho et al, 2018, p. 7).

Increases in educational enrolment were found to be the most important push factor in reaching lower levels of fertility. With Uganda having UPE, USE and high enrolments in primary school, one could argue that the most improvements is needed in reaching higher quality and improving the content within education, as well as to prevent the large amounts of students who drops-out. Delayed marriages for girls and women would delay their first pregnancy, which in turn should produce a shorter reproductive carrier, thereby lowering child and maternal mortality (Ariho et al, 2018, p. 10). It is when looking at the third contributor, the preferred number of children, that the correlations are not as clear. How will people's desires for large families and many children change?

It is difficult to draw clear lines between the explanatory background determinants and the proximate variables. Often they are intersectional and cause complex changes. It is argued that scholars comes from one or the other schools or paradigms. However, in this study it was found that the determinants are more interlinked and combined than first meets the eye. Family size preferences are affecting people's fertility behaviours, as in the decisions to whether or not to use contraceptives (Ariho et al, 2018, p. 10). The "unmet-need" as Pritchett claims "does not reflect just women who want contraceptives (a supply need) but also women who require motivation to want what they are presumed to need. This usage is consistent only either a very broad, or a very paternalistic, definition of need" (Pritchett, 1994, p. 31). For this he uses the example of Uganda where 27% of women are said to have an unmet need, but of fertile married women, only 5%, wants no more children and not practicing any form of contraception (ibid, p. 34).

Ezeh et al (2009) studied the stall in fertility decline in Eastern African countries. Contrary to what has been said about fertility transition cutting across various socio-economic and geographical groups in Africa, they found strong selectivity of fertility stall in different groups and regions in four East African countries. They claim that these results are consistent with the models that emphasise the role of international and national commitments to family

planning programs. The study uses three models in terms of the factors important in explaining levels and trends in fertility: the reproductive behaviour model, the socio-economic model, and the institutional model. In Kenya and Tanzania, despite national stalls in fertility decline, fertility continued to decline among the most educated women. In contrast, Uganda experienced national fertility decline, but a stall among the urban and most educated women. Overall, no significant change in desired family size was seen. The use of contraceptives increased in Tanzania and Zimbabwe, but did not change in Kenya and Uganda. The study emphasises the importance of national policies based on human development (health and education) following the consequent high burden of sexually transmitted infections, HIV, unwanted pregnancies, unsafe abortions and high rates of fertility among youths (adolescent sexuality) (Ezeh et al, 2009).

As mentioned by Blacker et al, Ugandan women appear to want more children than their Kenyan neighbours, both indicated by 'wanted fertility' as well as 'ideal family size.' Generally, the ideal Ugandan family size is at least one child more than that of Kenyan (Blacker et al, 2005, p. 364). A majority of the secondary material and research used in this literature review, is based on DHS and WFS as sources of their statistical data. Still, very different and varied findings and conclusions are drawn, based on the same data. Muhoza et al point out three main arguments of criticism in validity and reliability of the responses on the question on desired fertility. They claim that the answers could be misleading, not taking child mortality into account. Second, there could be rationalisation of desired family size to the actual family size. However, Muhoza et al show that even if there would be a rationalisation in some cases, it does not apply to the majority of the respondents. And third, that the responses from women may not reflect the real norms that affects fertility decisions, especially where unbalanced gender relations are predominate (Muhoza et al, 2014, p. 4 & 5). Punch (2014) claims that it is harder du reduce error in educational, social and psychological measurement (Punch, 2014, p. 239).

8. Conclusions

Uganda differs from many global and regional fertility trends. The causes are many and he relation between desired fertility and reproductive behaviour may be much closer in some settings and contexts, than in others. Through a literature review, this study seeks to identify possible explanations of why fertility remains high in Uganda, and most predominantly, why desired fertility remains high. The Demographic Transition Theory is used as a background theory and a starting point for the study, where Uganda is assumed to be the deviant case. This is done through asking the specific research questions: Why is Uganda experiencing a stall in fertility decline and what implications does the high desired fertility have for the fertility transition? Middle-range theories are used to reach a lower level of abstraction and to create clear links to the social reality.

This study contributes to the perspective that both socio-cultural and socio-economic factors should be considered when studying fertility behaviour and desired fertility. Accordingly, this study found background and proximate determinants are more interlinked than first meets the eye. Desired fertility must still be seen as one of the substantial factors of high fertility. With this said, it does not mean that a reduction or slowing down of population growth should not be desirable for varied developmental, economic and environmental reasons. In some cases it might even me necessary. Through empowering women to take command over their reproductive health, as well as giving them the right to do so, would allow women to be in charge of the outcome.

Previous literature has shown the importance of education as a factor in fertility decline. With Uganda having high enrolments as well as free universal primary and secondary education, the issues seem to lay in the quality and the content of the schooling. Preventing girl from dropping out of school would directly impact fertility by delaying pregnancies and early marriages.

National policies facilitating opportunities of employment for women are needed to weaken the gender stratification, to make it possible for women to be contributors to the household income. With a stronger economy and more efforts from government, it would be beneficial to create a sector in reproductive health, not depending on foreign aid for funding and the fluctuations of international politics. Consistency in funding and policy, could possibly be the key to the path of consistent fertility decline that Uganda missed out on.

Many areas within reproductive behaviour needs further research. Desired fertility, although complex and difficult to measure, should be looked at in-depth to bring knowledge about persistently high fertility and low contraceptive use. Qualitative studies are needed to further explore the concept of desired fertility and the relationships between different factors. Additional research is required on the magnitude of the dependency on foreign aid within the sector of reproductive health. What does the global political movements and changes mean for countries undergoing a fertility transition?

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