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TO NUDGE OR NOT TO NUDGE: ETHICS OF NUDGE THEORY IN ORGAN DONATION IN GHANA

BY

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DECLARATION

I, Anthony Gyening-Yeboah, hereby declare that apart from the references used and duly acknowledged, this dissertation is my own work, done under the supervision of my supervisor, Prof. Amos Laar. All references to other researchers' materials used have been duly acknowledged. I further declare that the study has not, in part or whole, been presented to any institution for any award.

Anthony Gyening-Yeboah	Prof. Amos Laar
(Student)	(Supervisor)
……	……
(Signature)	(Signature)
January 30, 2023	January 30, 2023
(Date)	(Date)

DEDICATION

This work is dedicated to my biological father, His Lordship Justice Anthony Kwadwo Yeboah, JA (1957-2019), and my spiritual father, Rev. Fr. Dr. Isidore Bonabom, SJ (1970-2015). I could not get the opportunity to share with you my excitement when I first heard about Nudge theory on BBC World Service 101.3 FM in Accra. I miss the times we spent together. Till we meet again, *may the Force be with you*.

ACKNOWLEDGEMENT

It takes a village to raise a child. The words of our African ancestors have never been truer, even though contemporary Africans are severing the umbilical cords that connect us to our village. Nonetheless, in the quest for academic excellence, it still takes a village to nurture the mind and skills. It is my prayer that I do not lose the academic village needed to raise the next generation of African scholars and leaders. I am grateful to the village that nurtured my academic journey. Your calabash of fresh palm wine remains unbroken.

I am grateful to my supervisor, Professor Amos Laar, for his support and for believing in me, even when fatigue and stress attempted to steal a better part of me. I am grateful to my father, His Lordship Justice Anthony Kwadwo Yeboah, for first teaching me how to learn, unlearn and relearn; and secondly for teaching me how to be a person of ethics, especially in a world where people are quick to exploit and abuse the vulnerable. I am grateful to mother, Mrs. Rebecca Okyere Yeboah, for her strength and prayers. I am grateful to my wife, Ohemaa Adoma Opoku Siaw, for her patience whenever I escaped into my books and thoughts to reflect and write. I am also grateful to her for buying the book, *Nudge: The Final Edition* for me. I am grateful to my siblings and friends for their support. The words of our ancestors continue to remain true: *'onipa firi soro bɛsi a, ɔbɛsi onipa kurom.'*[1] Finally, I am grateful to God for the past, present, and future.

[1] Translation: When a person descends from above, he descends into a human society.

ABSTRACT

Introduction

Globally, there is a rising prevalence of end-organ failures. This has resulted in the need for organ replacement therapies, including organ transplants. In Ghana, there is no established organ transplant system, and there are no working organ donor recruitment strategies in place. There is a wide gap between viable organ demand and supply. Different organ donor recruitment strategies exist in different parts of the world. Voluntary organ donation has not been able to narrow the demand and supply gap. The organ market, on the other hand, is characterized by exploitation of the poor, and questionable consent processes. Nudge theory-based approach has been found to increase organ donation; however, it has also been criticized for being manipulative and coercive. There is paucity of data on nudge theory and organ donor recruitment in Ghana. This work seeks to explore whether Nudge theory (libertarian paternalism) sits well with African moral thought, and whether there is space for nudging in organ donor recruitment in Ghana.

Methodology

Adopting a comparative analysis approach, I aimed to explore and evaluate ongoing debate surrounding ethical basis of organ donor recruitment strategies in Europe, America, and Middle East. In addition to other literature, *Nudge: The Final Edition,* a book by Richard H. Thaler and Cass R. Sunstein, was purposefully selected as it was the current edition of the original work where Nudge theory was first proposed. Various organ donor recruitment strategies were evaluated using Caesar Atuire's African Normative Framework, and Jennifer Ruger's framework that combines Aristotle's political theory, Amartya Sen's Capability Approach, and Cass R. Sunstein's Incompletely Theorized Agreements (ITA).

Results

Nudge theory (Libertarian paternalism) was developed from the concept of bounded rationality, and heuristics and bias. It is in sync with African moral thought, using African

normative framework–ontological communitarianism, empathetic humanism, and virtuous character–and Ruger's framework that combines Sen's capability approach, and Sunstein's incompletely theorizing agreements. African moral thought supports voluntary organ donation, but not organ markets. Voluntary organ donation and Nudge theory-based organ donation are ethically justifiable organ donor recruitment strategies in Ghana, and they are both supported by African moral thought. Soft presumed consent is a commonly used nudge in donor recruitment. Voluntary organ donation can be complemented by other nudge elements to enhance the outcome. Organ market is not an ethically justifiable organ donor recruitment strategy, and it is also not supported by African moral thought, especially considering how it commodifies personhood.

Conclusion

Nudge theory-based approach to organ donor recruitment sits well with African moral thought. Soft presumed consent is a recommended nudge for organ donor recruitment in Ghana. It also benefits from other nudges to enhance outcome. Voluntary organ donation is ethically justifiable in Ghanaian socio-cultural context, and it can be complemented by other nudge elements to enhance outcome. Nudge theory-based approach, and voluntary organ donation can coexist in Ghanaian sociocultural context.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF ACRONYMS

BIT……. Behavioural Insight Team

EPI……..……...……. Expanded Programme on Immunization

ITA…… Incompletely Theorized Agreements

MAC…….Mandated Active Choice

SSNIT……Social Security and National Insurance Trust

VAC……... Voluntary active choice

CHAPTER ONE

1.0 INTRODUCTION

This section introduces readers briefly to the background of the central theme of this thesis, the problem statement, conceptual framework, the aim of the research, and the questions that are expected to be answered. The section also includes the contribution this thesis seeks to make to bioethics, especially bioethics in Ghana.

1.1 Background

Africa is beleaguered with both communicable and non-communicable diseases (Ulasi et al., 2021). End-organ failure, which is a terminal complication of some diseases, is on the rise with its consequential demanding health care needs (Kaze et al., 2018; Ulasi et al., 2021). The ideal lifesaving treatment option for end-organ failures is organ transplant (Ulasi et al., 2021). Compared to other parts of the world, sub-Saharan Africa is suffering the most from end-organ failures, yet access to organ transplant is nearly nonexistent (Muller et al., 2014; Ulasi et al., 2021). There have been failed attempts at sustaining organ transplantation programmes in some sub-Saharan African countries: Ghana is one of them. Amongst other things, the lack of national ethics and legal framework to sustain this programme is a major problem. Like other countries, shortage of organs militates against establishing and sustaining organ transplantation programmes (Muller et al., 2014; Ulasi et al., 2021). In Ghana, personal beliefs, sociocultural peculiarities, inadequate knowledge on organ transplantation and low literacy rates have contributed to the widening gap between organ demand and supply. The need to establish a vibrant organ transplantation programme in Ghana with a reliable organ recruitment protocol to save lives is imminent (Banyubala, 2014b; Osafo et al., 2018). Voluntary/Altruistic organ donation alone has somewhat failed to balance organ demand and supply. Organ market as an option has been characterized by exploitation of the poor, unfairness, and defiance of prima facie ethical principles against both donors and recipients (Albertsen, 2020; Becker & Elías,

2007; Lewis et al., 2021a; Ulasi et al., 2021). In recent times the idea of using tools of behavioural economics via nudge theory or libertarian paternalism has been suggested to narrow this widening gap (Thaler & Sunstein, 2021b). Like the organ market, the use of nudge theory has also been faced with criticisms that the theory invalidates any form of consent that may be provided in organ recruitment process (Brooks, 2013; Sunstein & Thaler, 2003). Critics intimate that Nudge theory defies fundamental principle of respect for autonomy (Thaler & Sunstein, 2021b). Proponents also argue that though nudges employ libertarian paternalism, which exploits heuristics and bias, it still allows agents to freely choose (Thaler & Sunstein, 2021b). In other words, there is no coercion, only re-arrangement or reorganization of choice architecture to influence behaviour (Brooks, 2013). Some countries have used nudge theory-based systems like opt-out, opt-in, prompted choice, mandated active choice and voluntary active choice systems to enhance organ donation (Gorin et al., 2017; Kosters & Van der Heijden, 2015; Simkulet, 2018; Thaler & Sunstein, 2021a). To the best of my knowledge, there are no studies evaluating the ethical basis of nudge theory in organ donor recruitment in Ghana, a sub-Saharan African country, and an organ transplant-naïve country. However, a study conducted into marketing strategies of the telecommunication industry in Ghana using behavioural economics approach, revealed that the strategies employed by telecommunication companies that were studied could be explained by theories of behavioural economics (Amoafo, 2019). I hypothesize that employing nudge theory in Ghana is ethical and socio-culturally permissible; and it is an effective step to take in designing and implementing organ recruitment programmes.

1.2 Problem Statement

Prevalence of end-organ failures is rising in Ghana (Boima et al., 2017; Kaze et al., 2018; Muller et al., 2014; Tannor, 2018). This has resulted in increasing demand for organ

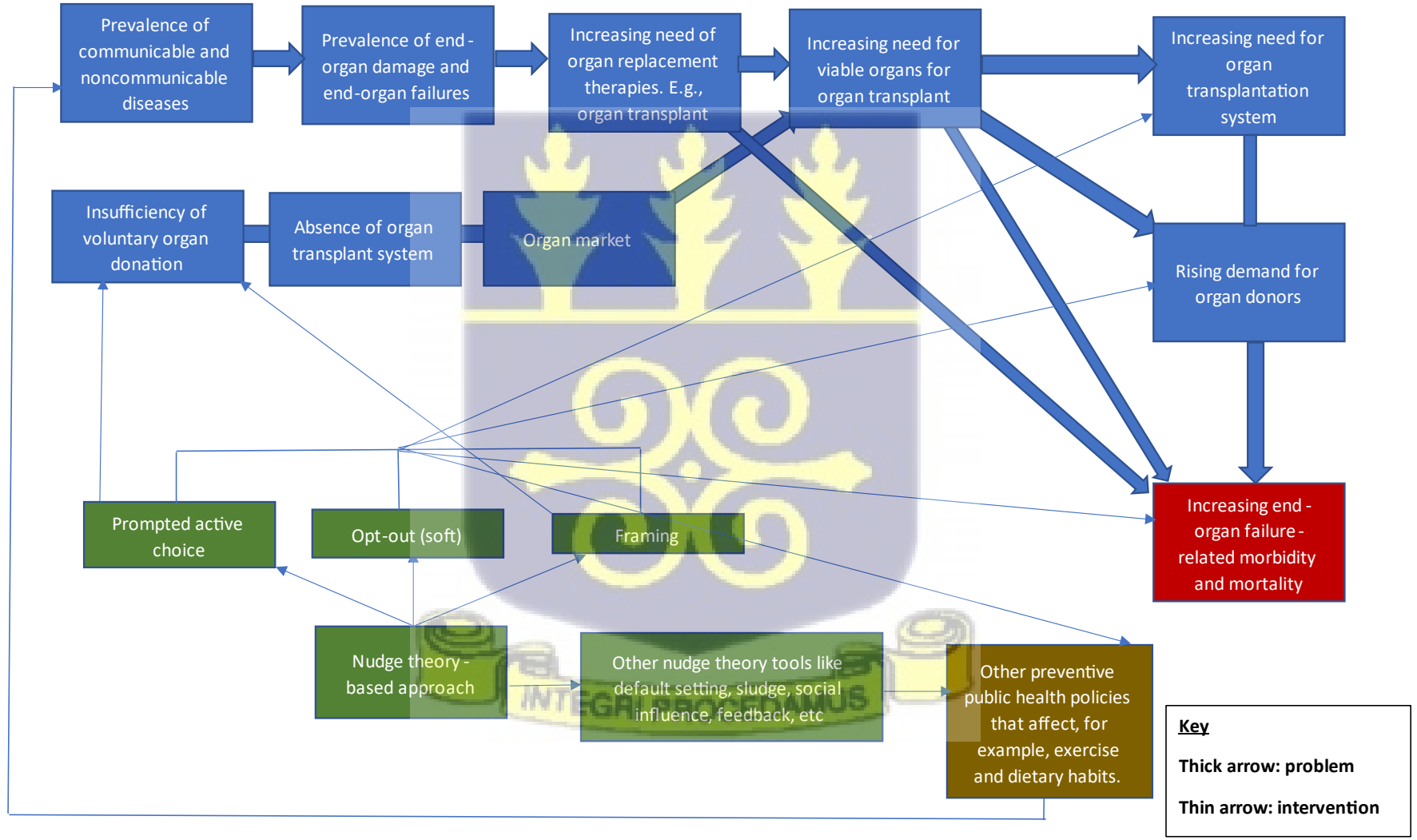
replacement therapies like haemodialysis in, for example, end-stage renal disease, and viable organs for organ transplant (Boima et al., 2017). However, there is no existing organ transplant system in the country, and there is no existing structure to regulate recruitment of organ donors (Loua et al., 2020; Muller et al., 2014). This has widened organ need and organ supply gap, leading to end-organ failure-associated morbidity and mortality (Ulasi et al., 2021). Voluntary donation has failed to bridge the gap (Lewis et al., 2021b; Ulasi et al., 2021), and the sale of organs has been associated with exploitation of vulnerable stakeholders (Moniruzzaman, 2018). The concept of Nudge theory or Libertarian paternalism has been shown to be associated with an increase in organ donation (Gorin et al., 2017; MacKay & Robinson, 2016). Be that as it may, it has been criticized for defying the prima facie principle of autonomy (de Quintana Medina, 2020). The ethics of nudge theory in recruiting organ donors has not been demonstrated in the Ghanaian sociocultural context.

1.3 Theoretical Framework

Communicable and noncommunicable diseases can be complicated by end-organ damage, which may be followed by end-organ failure. The prevalence of these diseases and their complications have led to a rise in organ failures, and an increase in the need for organ replacement therapies like organ transplant (see blue boxes connected by thick arrows in figure 1). The demand for viable organs, worsened by the absence of an organ transplant system, insufficiency of voluntary organ donation, and undesirability of organ market system, has overwhelmed the limited supply of viable organs, leading to heightened need for organ donors and an organ transplant system (see blue boxes connected by thick lines and arrows in figure 1). The aforementioned factors have resulted in increasing end-organ failure-related morbidity and mortality (see red box in figure 1). Nudge theory, through prompted active choice, soft opt-out, and framing, however, increases organ donation to meet the increasing need for organ

donors, which ultimately ameliorates the widening demand-supply gap and the resultant end-organ failure-related morbidity and mortality (see figure 1 showing green boxes with thin arrows). This indirectly occurs through complementary and synergistic impact of nudges on voluntary organ donation (see figure 1 showing thin arrows between nudge elements and insufficiency of voluntary organ donation). Also, nudges directly, as an organ donor recruitment tool, increases organ donation to meet the increasing demand for organ donors. Furthermore, nudges can be incorporated into organ transplantation systems as organ transplantation systems (see in figure 1, the connection between green boxes and blue boxes). These effects would ultimately intervene in the increasing organ failure-related morbidity and mortality (see in figure 1, the connection between green boxes and the red box). Nudges are also potential public health strategies, which can be utilized to slow down the rising prevalence or reduce the prevalence of communicable and noncommunicable diseases. This route would ultimately target the root cause of organ damage and organ failure, which would reduce the demand for viable organs for transplant (see in figure 1, the thin arrows connecting green boxes to blue boxes through gold coloured box). Nudge theory works directly and indirectly to narrow organ demand and supply gap.

Figure 1: Author's depiction based on literature review



1.4 Research Questions

1. What are the ethical justifications of voluntary organ donation and organ market in Ghana?
2. Is nudge theory-based approach to organ donor recruitment ethically justified in Ghanaian sociocultural and public health context?
3. What is the most ethically appropriate strategy for recruiting donors in Ghana?

1.5 General Objective

To evaluate to the ethical justification of nudge theory in the recruitment of organ donors in Ghana.

1.6 Specific Objectives

1. To evaluate the ethical underpinnings of voluntary organ donation and organ market systems in Ghana.
2. To determine the ethical justification of nudge theory-based approach to organ donor recruitment in Ghana.
3. To recommend appropriate ethical strategies in recruiting organ donors in Ghana.

1.7 Justification of this Normative Study

Currently Ghana has no national organ transplant framework which stipulate any organ donor recruitment strategy (Banyubala, 2014b). However, there is an urgent and rising need for organ replacement therapies, which includes organ transplant (Banyubala, 2014b; Osafo et al., 2018). This normative analysis seeks to demonstrate whether voluntary organ donation and organ market are sensitive to Ghanaian sociocultural setting, even though several studies have shown that voluntary organ donation is not sufficient to meet organ need; and organ market is

exploitative. Furthermore, it would be demonstrated that Nudge theory as a potential organ donor recruitment strategy, is sensitive to Ghanaian sociocultural context. There is paucity of data on nudge theory, organ donation and African culture. This thesis would enrich the discourse as it opens doors to other avenues to recruiting organ donor. Lastly, this thesis would contribute to the discussions on the most appropriate and socio-culturally and ethically sensitive approach to recruiting donors in Ghana.

CHAPTER TWO

2.0 LITERATURE REVIEW

This section reviews history and current state of organ transplant in Ghana, and sub-Saharan Africa, including the perspective of the Ghanaian society on organ transplant as a clinical intervention. The challenges facing establishing and sustaining organ transplant programme in Ghana are explained herein. Furthermore, various organ recruitment strategies are discussed, including nudge theory-based approach. The concept of libertarian paternalism or nudge theory is explained in detail, to provide the background for further discussion of the ethics in subsequent sections.

2.1 Sub-Saharan Africa as an epidemiological boiling pot

Population studies show changing pattern of mortality, causes of death, fertility, and life expectancy. This has been termed as epidemiological transition (Santosa et al., 2014). Classically, there are five stages of epidemiological transition. These are age of pestilence and famine; age of receding pandemics; age of degenerative diseases and man-made diseases; age of declining cerebrovascular mortality, lifestyle modifications and resurgent diseases; and age of emergence of new diseases (Santosa et al., 2014). Populations, especially industrialized countries, were found to follow a linear trajectory, however, this trajectory was not identified in all populations, especially in sub-Saharan African countries and low- and middle-income countries (Ciccacci et al., 2020; Santosa et al., 2014). Intermediate sub-model has been proposed to describe countries that have overlapping pattern of mortality from both infectious diseases and noncommunicable diseases. Slow sub-model also describes countries that are least prepared to handle infectious diseases, noncommunicable diseases and emerging diseases: triple burden (Santosa et al., 2014). Another model which has been proposed to describe the epidemiological transition existent in countries like Latin American countries and sub-Saharan

African countries is protracted polarized model (Agyei-Mensah & De-Graft Aikins, 2010; Santosa et al., 2014). According to this model, the burden of infectious diseases has prolonged and co-exists with noncommunicable diseases. In addition, the morbidity and mortality pattern is polarized along lines of social class, such that infectious diseases are common amongst the poor and noncommunicable diseases are common amongst the rich (Agyei-Mensah & De-Graft Aikins, 2010; Santosa et al., 2014). Ghana, especially the regional capital city, has been described to have protracted polarized model of epidemiological transition: a double burden of disease (Agyei-Mensah & De-Graft Aikins, 2010). Pattern of morbidity, mortality and fertility has also been described to have gone through three stages of epidemiological transition (Ofosu-Amaah, 2005a, 2005b). The first epidemiological transition consists of communicable and nutritional diseases (Ofosu-Amaah, 2005a). With changing socioeconomic status amongst people, advent of germ theory of disease, advancement in diagnostic tools, improvement in hygiene and sanitation, and discovery of antibiotics and vaccines; the first epidemiological transition gave way to the second epidemiological transition (Ofosu-Amaah, 2005a). This second transition entails chronic/non-communicable diseases like hypertension, diabetes, dyslipidaemia, obesity and cancers (Ofosu-Amaah, 2005a). There is also the third epidemiological transition, which has to do with re-emergence of infectious diseases with multi-drug resistance, which can have a global impact (Ofosu-Amaah, 2005b). Extreme drug resistant *Mycobacterium tuberculosis* is a typical example (Ofosu-Amaah, 2005b). Unlike developed countries with high socioeconomic status and improved public health care system, sub-Saharan Africa is still battling with both first and second epidemiological transitions, with the third epidemiological transition (Ofosu-Amaah, 2005a, 2005b). From models described hereinbefore, which show there is at least a coexistence of infectious and noncommunicable diseases (including re-emergent diseases), sub-Saharan Africa can be said to be epidemiological melting pot.

End-organ damage is not an unusual consequence of diseases (Kumar et al., 2015c). Both communicable and non-communicable diseases can culminate in end-organ damage (Ulasi et al., 2021). For example, severe malaria can be complicated by acute kidney injury (Kumar et al., 2015a). Pulmonary tuberculosis can be complicated by respiratory failure (Kumar et al., 2015a). Human Immuno-deficiency Virus (HIV) infection can also be complicated by damage of nearly every organ in the human body (Kumar et al., 2015a). Non-communicable diseases can equally be complicated by end-organ damage (Ulasi et al., 2021). Examples are, hypertensive nephropathy, hypertensive retinopathy, hypertensive heart disease, cerebrovascular accident, diabetic retinopathy, diabetic nephropathy, myocardial infraction, lupus nephropathy and others are end-organ damages following noncommunicable diseases (Kumar et al., 2015c). Cancer in its fundamental pathophysiology can arise from every tissue and organ in the human body, though cancers of some organs are more prevalent (breast) than others (heart) (Kumar et al., 2015b). In 2018, World Health Organization (WHO) reported that 71% of deaths worldwide were as a result of noncommunicable diseases, killing about 41 million people annually (Ulasi et al., 2021). Most of the deaths occurred in low-income countries: over 85% (Ulasi et al., 2021). Globally, the prevalence of chronic kidney disease (CKD), a disease of end-organ, is 11.7% to 15.1% (Boima, Agyabeng, et al., 2020). About 50 million persons are suffering from chronic kidney disease globally; and about 78% of them are living in low- and middle-income countries (Boima, Agyabeng, et al., 2020). The prevalence of chronic kidney disease in low and middle income countries is 14.3% (Boima, Agyabeng, et al., 2020); sub-Saharan Africa is 13.9% (Boima, Agyabeng, et al., 2020; Boima et al., 2017; Boima, Ganu, et al., 2020; Osafo et al., 2018; Ulasi et al., 2021); and Ghana is about 13% to 17% (Boima, Agyabeng, et al., 2020; Boima et al., 2021; Boima, Ganu, et al., 2020). Globally corneal blindness is responsible for about 6 to 8 million cases; and in Ghana the prevalence of

corneal opacity is about 6.9% to 8.2% (Ackuaku-Dogbe & Abaidoo, 2019). The disease burden of end-organ failures in sub-Saharan African countries and Ghana cannot be overemphasized.

2.2 The state of organ transplant in Ghana and sub-Saharan Africa

Organ transplant is currently the ultimate lifesaving treatment option for end-organ failures (Lewis et al., 2021a). In 1954 the first successful organ and kidney transplant (from a living human donor) was performed (Thaler & Sunstein, 2021b). The first successful kidney transplant from a deceased human donor also took place in 1962 (Thaler & Sunstein, 2021b). In Africa the first successful organ transplant was performed in South Africa in 1966, and a year later, 1967, the first heart transplant in the world was also successfully performed in the same country (Ulasi et al., 2021). In 2008 South Africa started HIV-positive-to-positive organ transplant (Lewis et al., 2021a; Ulasi et al., 2021). According to the Global Observatory of Donation and Transplantation (GODT), about 140,964 organ transplants had been performed globally by 2018 (Lewis et al., 2021a). Deceased organ donation remains the leading source of organs as compared to living organ donation (Lewis et al., 2021a; Ulasi et al., 2021). In Ghana about 4000 new cases of end-stage kidney disease are reported each year (Osafo et al., 2018). Due to the paucity of kidney transplant opportunities in Ghana, haemodialysis remains the mainstay treatment (Boima, Ganu, et al., 2020; Ulasi et al., 2021). Even with this intervention, only 550 persons out of the estimated 4000 new cases of end-stage kidney disease undergo haemodialysis annually (Osafo et al., 2018). This is because there is significant limited access to haemodialysis, infrastructurally and financially (Antwi, 2015). The first successful organ transplant (kidney transplant) was performed in Ghana in 2008 (Osafo et al., 2018). By 2014 only 17 live donor renal transplants had been performed (Osafo et al., 2018). This feat was made possible with the support of the University Hospital in Birmingham, and a United Kingdom-based registered charity organization, Transplant Link Community (Osafo et al.,

2018; Ready et al., 2016). In spite of the international support, as of 2018 when *Osafo and colleagues* published the data on the 17 kidney transplant cases, they indicated that no organ transplant had been performed since 2016 (Osafo et al., 2018). A key challenge affecting organ transplantation worldwide is shortage of donors – living and deceased (Lewis et al., 2021a). In the United States, patients who are in need of organs averagely wait for 213 to 370 days; and in 2019 about 4925 patients died whilst waiting for organs (Lewis et al., 2021a). In Europe about 15% to 30% of patients die whilst waiting for organs (Lewis et al., 2021a). The sub-Saharan African situation is worse. Only eleven countries have ever performed organ transplant (Ulasi et al., 2021). These countries may or may not have an established transplant programme, or one at an embryonic stage (Ready et al., 2016; Ulasi et al., 2021). Out of the eleven countries, only 5 report their data to the Global Observatory of Donation and Transplantation (Ulasi et al., 2021). Globally, especially in Global North, there are existing transplant policies and programs that span from recruitment of donors, through transplant of organs, to post-transplantation management of donors and recipients (Lewis et al., 2021b; Noyes et al., 2019; Willis & Quigley, 2014). However, in Global South, a study conducted amongst countries World Health Organization Africa Region show that there is paucity of organ transplantation programmes, legislative/regulatory frameworks, robust infrastructure, and funding to ensure a successful organ donation to transplantation (Loua et al., 2020; Muller et al., 2014). Nevertheless, countries like Algeria, Côte d'Ivoire, Ethiopia, Kenya, Namibia, Nigeria, and Uganda have functional transplantation programmes, though for only living donors (Loua et al., 2020). Amidist the inadequate organ transplant system, there is also an existing transplant tourism where patients travel abroad to access organ transplant (Muller et al., 2014). Even this approach is to accessing organ transplantation programmes is poorly monitored and regulated (Muller et al., 2014). *Ulasi and colleagues* elaborated twelve challenges that have become barriers to establishing and sustaining organ transplantation programme in sub-Saharan Africa

(Ulasi et al., 2021). These are cost of treatment, challenges with therapeutic drug monitoring, dearth of skilled transplant workforce, no established transplant programmes, shortage of organs, poverty and unemployment, poor accessibility, cultural and religious consideration, poor coordination and management, inadequate legal and regulatory policies, and transplant tourisms (Ulasi et al., 2021).

2.3 Organ transplantation challenges and opportunities in Ghana

The Ghanaian organ transplantation situation is a quintessential context of a sub-Saharan African country. The challenges in Ghana include, inter alia, absent national ethics and legal organ transplant framework (Banyubala, 2014b). In fact, according to Ernest Owusu-Dapaa, there is no established body of Health Care Law in Ghana (Owusu-Dapaah, 2017). Comparing the Ghanaian situation to England and Wales, Owusu-Dapaa employed a four-pronged criteria to arrive at this conclusion (Owusu-Dapaa, 2014; Owusu-Dapaah, 2017). He said,

> "First, a field of law should have sufficient case law evidencing factual peculiarities requiring specialized analysis… Secondly, the field being considered should see significant development of interventionist or dedicated legislation to regulate specific relationships. Thirdly, it should have core principles or values which give it commonality and, at the same time, distinctiveness… Fourthly, a field of law should be able to sustain its existence and relevance by finding a place in legal education and scholarly works" (Owusu-Dapaah, 2017).

In the absence of a distinct and established body of Health Care Law in Ghana, it stands to reason that a proper regulation of organ transplant, which is intimately tied to medicolegal regulation would be absent. Divine N. Banyubala also argues more specifically to the regulation of organ transplant in Ghana. He posits that in as much as Ghana is making attempts

to initiate an organ transplantation programme, there is no relevant framework to guide this all-important cause. He said,

> "Ghana is making strenuous efforts to make organ transplantation a routine surgical procedure by the end of this year, yet it has no ethical or legal framework to guide the process" (Banyubala, 2014a).

In another paper, Banyubala brings to the fore the enormity of the issue pertaining to handling of human tissue in Ghana. He indicated that even removal and storage of human organs and tissues during autopsy, not necessarily for the purpose of organ transplantation, is mostly done without consent and without a proper guiding framework. He said, "There is no formal legal or professional framework for securing the requisite consent for the retention of organs/tissues and body parts following autopsies" (Banyubala, 2016). Nevertheless, the absence of a distinct body of Health Care Law, and a formal ethical and legal guiding framework in Ghana did not stop the team of health care professionals that were involved in the 2008-2014 kidney transplantation programme from attempting to ethically regulate their practice. The team adopted the the Istanbul Declaration on organ trafficking, transplant tourism and commercialism to ensure best practices and prevent transplant commercialization (Steering Committee of the Istanbul Summit, 2008); and also established a Transplant Ethics Committee, whose practice was guided by the United Kingdom Human Tissue Act 2004 (Osafo et al., 2018). The team rightly alluded to the lack of a national ethics and legal framework for transplantation as a major challenge (Osafo et al., 2018).

In addition to this significant ethico-legal vacuum that is hindering the establishment and sustenance of an organ transplant programme in Ghana, the unique sociocultural milieu also participates in militating against organ donation. Some scholars have argued for an Afrocentric approach that is based on communitarian African ethos, in ethical decision-making (Atuire et

al., 2020); and others have argued against even an ontological existence of an Afrocentric approach to ethics (Coleman, 2017). Laar and colleagues have also argued for an inclusion of African conceptualization of health into the global discourse surrounding health, as this would rope in diversity of cultures (Laar et al., 2021). Others like Banyubala have also specifically intimated that the Ghanaian sociocultural values can be used as a steppingstone in establishing organ donation and transplantation programme in the Ghanaian society (Banyubala, 2014a, 2016). He opines that this can be achieved without sacrificing the need to be sensitive to the Ghanaian religious and sociocultural context (Banyubala, 2014a, 2016). This position was against the backdrop of the Konkomba cultural values pertaining to death and ancestor-ship (Banyubala, 2014a, 2016).

Ghana practices medical pluralism (Amzat & Razum, 2014; Laar et al., 2021). From the moment Ghanaian African traditional medicine encountered Western medicine, there has always been a competition for patients between African traditional medical practice and the latter. It seems the typical traditional Ghanaian has an inherent desire for science, and not necessarily and specifically for Western medicine. This is because the Ghanaian has been interested in palpable, repeatable, and measurable health outcomes. Thus, pertaining to health-seeking behaviour–choosing between African traditional medicine and Western medicine– the Ghanaian chooses the medical system with the most promising outcome. P. A. Twumasi, a Ghanaian medical sociologist, argues that "…the [rural folk] resorts to the services of scientific medicine when immediate curative satisfaction has not been met within the traditional situation but has been in the scientific medical situation. However, the influence of various norms will also enter the determination of an individual's choice of alternatives. The patient is involved constantly in the problems of economizing in the sense that [s/he] weighs the costs and pleasures to be derived from each action [s/he] takes" (Twumasi, 1975b). He further posits that,

> "It is also worth noting that people can maintain a parallel set of orientations and in fact may be positively oriented both to traditional and scientific medical practices. In fact, utilizing sample from Accra, Acquah found this to be the case. The medical systems are by no means mutually exclusive. The functional scope of each system is largely determined by its ability to get results in cases of illness and or uncertainty. It would be expected then that in keeping with pragmatic spirit characteristics of so many aspects of life, the sick person would show a willingness to take what each medical practice has to offer, accepting each practice to the degree that its usage appears to yield favourable results" (Twumasi, 1975a).

Against this backdrop, it is fair to reason that establishing an organ transplant programme in Ghana that is well known to the society and in sync with the sociocultural milieu, creates a chance for the programme to gain roots. In fact, *Abenorku and colleagues* showed that only 33.5% and 50.6% of 1020 respondents in Ghana were aware of face transplant and organ transplant respectively; and 62.1% and 59.1% were willing to receive or donate a face or organ respectively when required (Agbenorku et al., 2013). In both cases the donors were referring to deceased donor options (Agbenorku et al., 2013). *Bioma and colleagues* also found out that amongst 342 patients with chronic kidney disease in Korle Bu Teaching Hospital, Ghana, 68.7% had heard about kidney transplant (Boima et al., 2021). About 67.3% of the respondents were willing to accept a donated kidney, 14.3% were indecisive and 18.4% were not willing to accept (Boima et al., 2021). Interestingly it was found that having knowledge of a likely improved quality of life post-transplant was associated with three times higher odds of accepting a kidney transplant, as compared to having no knowledge of a likely improved quality of life (Boima et al., 2021). In another study, *Bioma and colleagues* found out that amongst 480 non-patient respondents, 48.5% were willing to become living organ donors whilst 71.6% were willing to become deceased organ donors (Boima et al., 2017). About

eighty-five percent were willing to accept kidney transplant (Boima et al., 2017). The reasons for unwillingness to either donate or accept organs span religious, cultural and personal reasons (Boima et al., 2017). For example, one respondent indicated that she wanted her ghost to have a kidney (Boima et al., 2017). *Bioma and colleagues* conducted another study that showed that increasing level of knowledge pertaining to organ transplant; having a basic education; and being single were significantly associated with willingness to donate organ for transplantation (Boima, Ganu, et al., 2020). *Ackuako-Dogbe and Abaidoo* also found that 8.4% of 536 patients with different diseases of the eye were aware of eye donation from deceased donors (Ackuaku-Dogbe & Abaidoo, 2019). Amongst the respondents, 59.9% were willing to donate their eyes after death if they had the opportunity (Ackuaku-Dogbe & Abaidoo, 2019). In a study conducted amongst non-health university students in Ghana, *Antwi-Adjei and colleagues* found out that 88.8% and 17.2% of the 250 respondents were aware of organ transplantation and corneal transplantation respectively (Antwi-Adje et al., 2020). Fifty-four percent of the respondents were willing to donate their organs (Antwi-Adje et al., 2020). Amongst the donors 67.6% and 32.4% were willing to be deceased donors and living donors respectively (Antwi-Adje et al., 2020). Amongst the respondents who were unwilling to be donors, lack of information (47.6%) and complications of surgery (46.4%) were the main reasons behind their choices (Antwi-Adje et al., 2020). The studies cited hereinbefore portend that there is a knowledge and awareness gap amongst the Ghanaian population, but there is not necessarily a paucity of organ donation enthusiasm. With education on what organ transplant is and entails; and establishing ethically, legally, and culturally sensitive framework to protect donors and recipients, an effective organ transplant programme can be established and sustained in Ghana. Some may argue that there is significant cultural abhorrence towards removal of organs of the deceased, but the presence of post-mortem personality identity renegotiation (Banyubala, 2014a), coronial and hospital autopsies, blood donation and transfusion, and surgical

procedures like mastectomy, nephrectomy, prostatectomy, orchidectomy, colectomy, hysterectomy, oophorectomy, salpingectomy, amputations, and evisceration show that there can be coexistence of Western medical interventions and Ghanaian traditional cultural values.

2.4 Recruiting organ donors

There have been different attempts at bridging the worsening organ demand and supply gap worldwide. Different jurisdictions have employed different models or systems – voluntary donation, organ markets or incentivized donation, and nudge theory-based organ donation (Abouna, 2003; Adongo et al., 2021; Albertsen, 2020; Becker & Elías, 2007; Freed, 2016; Ghods, 2004; Goyal et al., 2002; Joralemon, 2001; Kwan et al., 2020a; Lewis et al., 2021a; MacKay & Robinson, 2016; Moniruzzaman, 2018; Noyes et al., 2019; Rees et al., 2017; Rodrıguez-Arias & Morgan, 2016; Thaler & Sunstein, 2021b). All these systems individually have unique ramifications and ethical implications. Voluntary or altruistic donation is supported by the ethical principle of respect for autonomy (Beauchamp, 2003; Gillon, 1994, 1995) of the living organ donor, the deceased organ donor or the family of the deceased potential organ donor. In this regard, a competent donor or family of deceased potential donor voluntarily consent to organ donation. The recipient may or may not be a relative, even though studies show that some donors may prefer donating to only relatives, whilst others are not selective (Lewis et al., 2021a). In addition to respecting the autonomy of a living potential donor, upholding beneficence and non-maleficence towards the donor as the scope (Beauchamp, 2003; Gillon, 1994) of these prima facie principles is key. The sale of human organs and tissues have been banned globally (Lewis et al., 2021a), save Iran where there is an incentivized organ donation system that is a semblance of a regulated organ market (Goyal et al., 2002; Lewis et al., 2021a; Thaler & Sunstein, 2021b). India and Bangladesh on the other hand have equally banned the sale of human organs, but they have an unregulated organ market

or a black organ market, which has persisted for about two decades (Goyal et al., 2002; Moniruzzaman, 2018). There are four different models of organ markets. They are unregulated current market, regulated current market, payment-for-consent futures market and family-reward futures market (Albertsen, 2020). There have been arguments in support of organ market, and also proposed economic models that will use market tools to balance the organ demand and supply (Healey, 2008). Mainly, the worsening morbidity and increasing mortality amongst persons with end-organ failure have inspired the need to use economic models to save lives that can be saved (Beauchamp, 2003; Healey, 2008; Roth et al., 2004). Also, the emphasis on the autonomy of the individual to the extent of having the right to offer his/her organs for sale has also influenced the position of the proponents of organ market, incentivized market or economic models for organ donation (Healey, 2008; Roth et al., 2004). Others argue that organ markets in its various ramifications defies the four prima facie principles of ethics – respect for autonomy, beneficence, nonmaleficence and justice (Goyal et al., 2002; Moniruzzaman, 2018). The socioeconomic disparity between the potential sellers and buyers makes consent more of financial coercion than voluntary informed consent (Goyal et al., 2002; Moniruzzaman, 2018). Thus, the vulnerability of the poor may lead to exploitation because monetary incentives will only be enticing to the poor but not the rich (Goyal et al., 2002; Moniruzzaman, 2018). This socioeconomic disparity also creates an unfair system where the poor would become a leading supplier of organs, yet the poor would also not have equal access to organs when in need (Goyal et al., 2002; Moniruzzaman, 2018). The nature of the organ market, regulated or unregulated, seeks to commoditize the human person and organs, such that we no longer value, nor owe the person beneficence and nonmaleficence (Albertsen, 2020; Goyal et al., 2002; Moniruzzaman, 2018). The person is seen as a shop of organs, and not a human person deserving of nonnegotiable respect.

Another modality of recruiting organ donors in order to bridge the demand and supply gap is the use of Thaler and Sunstein's concept of Nudge theory (Thaler & Sunstein, 2021b). According to the theory a choice architect (for example, a policy maker) organizes the context within which people make choices, with the aim of predictably influencing the behaviour of the actors (Thaler & Sunstein, 2021a). This theory relies on Herbert Simon's concept of bounded rationality (Aumann, 1997; Reinhard Selten, 1990, 2001), and Kahneman's concepts of heuristics and bias (Kahneman, 2011; Thaler & Sunstein, 2021a). The presence of cognitive system 1 (automatic system or doer) and cognitive system 2 (reflective system or planner)[2] in human reasoning and behaviour are holistically acknowledged and exploited in the implementation of Nudge theory-based policies (Kahneman, 2011; Thaler & Sunstein, 2021a). System 1, also known as automatic system, is targeted in order to influence people's behaviours and choices (Thaler & Sunstein, 2021a). Though nudging may appear to be a separate organ donation system, I argue that it is technically not the case. It can and in fact, it does coexist with the other systems. It is the oil that greases the wheels of other systems – voluntary/altruistic donation or organ market/incentivized organ donation. Though employing nudge theory in the clinical setting, especially nudging informed consent and organ donation, has been criticized (Brooks, 2013; MacKay & Robinson, 2016; Simkulet, 2018); I am of the view that in an organ transplantation-naïve society and sub-Saharan African country like Ghana, employing nudge theory in donor recruitment is not only ethical but also socio-culturally permissible and necessary in policymaking. Different ways of applying nudge theory in organ donation are opt-in, opt-out, mandated active choice, voluntary active choice and prompted choice systems (Thaler & Sunstein, 2021a). Opt-out system is further divided into soft and hard opt-out system based on the right and power of the deceased's family to override the presumed consent guiding the actions of the health care professionals (Noyes et al., 2019;

[2] The two types of cognitive systems, system 1 and 2, would be explained in detailed later.

Thaler & Sunstein, 2021b). This will not be the first time Ghana is employing nudge-like tools in public policy decisions, especially pertaining to public health. In Ghana, the National Immunization Programme uses routine immunization strategy, which practically constitutes an opt-out system (Agadzi, 1978; Shen et al., 2014; World Health Organization, 2016). Also, a statutory retirement and insurance scheme, Social Security and National Insurance Trust (SSNIT) for public sector workers in Ghana, which extends to private sector workers also employs opt-out system in its implementation. This policy is meant to ensure that every public sector worker in Ghana was enrolled on a default retirement package. It exploited status quo bias (Thaler & Sunstein, 2021a) to widen its base of policyholders. Social modelling, social influence and framing are all used in the policymaking in the Ghanaian public health sector. It stands to reason that the use of nudge-like approach is not new to the Ghanaian society. Considering the enormity of the morbidity and mortality of end-organ damage in Ghana, an organ transplantation-naïve Sub-Saharan African country, Nudge theory-based approach can be used to ethically bridge the organ demand and supply gap; ethically save lives of donors and recipients; respect the autonomy of living and deceased donors and recipients; and acknowledge and respect the autonomy of the families of deceased potential donors. Subsequent sub-sections under this chapter would be used discuss bounded rationality, heuristics and bias, and nudge theory in detail, as these concepts are central to the theme of this thesis. Also, chapter 3 would be used to discuss in detail African normative frame, capability approach and incompletely theorizing agreements, as these are the frameworks that would be used to unpack and explore the place of Nudge theory in African moral thought.

2.5 Bounded rationality

Human cognitive system, Kahneman notes, is categorized into two systems: automatic and reflective systems (Kahneman, 2011). The automatic system is also known as system 1 or fast

or intuitive system; and the reflective system is also known as system 2 or slow or deductive system (Kahneman, 2011; Thaler & Sunstein, 2021a). System 1 uses heuristics to solve problems, whilst system 2 slowly processes information using logical reasoning and detailed evidence to solve problems. System 2 is considered a rational decision-making sector of the human cognitive system, whilst system 1 is *not* considered as a rational area. This is because the latter does not require all the necessary pieces of information to make decisions or provide answers. Because of this, system 1 is more prone to bias and errors than system 2. Humans usually use system 1 routinely because it is less demanding than system 2. It allows routine activities of daily living to flow smoothly with the help of varying rule of thumb. However, when a more complex problem is encountered, system 2 is brought in to solve it. For example, solving advanced mathematics would require system 2, whilst brushing one's teeth in the morning would utilize system 1 (Kahneman, 2011; Thaler & Sunstein, 2021a). The heuristics used by the fast/automatic/intuitive system include anchoring, availability, representativeness, optimism, loss aversion, status quo bias (inertia) and social influence. These heuristics are also sources of bias (Thaler & Sunstein, 2021a). The focus of this study is system 1. Nudge is designed to exploit system 1 in decision-making and behaviour change. Various heuristics used by system 1 are explained further in subsequent subsections.

2.5.1 Anchoring

Anchoring, as one of the rules of thumb for system 1, is manifested in situations where one is likely to provide/choose an answer that is closely related to a reference/anchor that has been provided earlier. Anchoring is sometimes termed as "anchoring and adjustment" (Thaler & Sunstein, 2021a). A typical example is the approach to bargaining in Ghanaian local markets like *Kejetia market*, *Bantama market*, *Makola market*, *Madina market* and *Kwame Nkrumah Circle*. When traders are asked the cost of items, they give a reference selling price (an anchor) around which, a buyer who intends to bargain would assume that value of the commodity

revolves around that selling price. Even a buyer who believes that the proposed selling prices is exaggerated would not propose a price, which is extremely lower than the proposed selling price (anchor) by the trader. By providing an anchor, one's system 1 hardly deviates too far from it. A study conducted by Kareem Haggag, a behavioural economist, revealed that two different cab companies that suggested different anchors for tipping drivers on electronic payment systems had the company with higher anchors receiving higher tips from passengers. Company 1 suggested 15%, 20% and 25% to be voluntarily paid as tip to drivers, whilst company 2 suggested 20%, 25% and 30%. Drivers in company 2 had higher earnings than drivers in company 1, because passengers gave average tip that was greater than what was paid by passengers in company 1. Interestingly, passengers had the option to decline payment, and in fact, some passengers declined payment. The results of the study revealed that in the presence of anchors, humans are likely to use automatic system to adjust closely to the anchor. Answers that are associated with anchors are likely to be wrong if anchors are deliberately or inadvertently erroneous (Thaler & Sunstein, 2021a).

2.5.2 Availability heuristics

For availability heuristic, when an event is encountered often, it is likely to be assumed to be frequent or prevalent. Humans usually use this heuristic to access risk. For example, when incidents like homicides or armed robberies are broadcasted often on the media than suicide, it is likely to assume that the former is more prevalent than the latter; and therefore, people are more likely to die from the latter. However, in the United States of America for instance, gun-inflicted suicides are twice as likely to occur than homicide. The media reportage of gun-inflicted homicides influences people to use availability heuristics to assume that gun-inflicted homicides are more prevalent. Studies have also shown that insurance against flood and earthquake disasters increases following incidents of flood and earthquake. However, as the memory of these disasters recedes, the rate of purchasing insurance policies also decline.

Availability heuristics underestimate the risk of noncommunicable disease like stroke because that they are given less attention in the media (Thaler & Sunstein, 2021a).

2.5.3 Representative heuristics

Representativeness or stereotypes are heuristics that are also used by the automatic system. For example, the Nobel Prize in Chemistry 2022 was awarded to two scientists for the discovery of a cutting-edge gene editing tool called CRISPR-Cas 9[3] (Isaacson, 2021; Jinek et al., 2012). Without knowing the scientists who made this discovery, it is likely to presume these scientists are greyed or bald old male professors. These scientists are rather women: Professor Jennifer Doudna and Professor Emmanuelle Charpentier. The erroneous assumption is as result of the stereotype that Nobel Prize laureates in the basic sciences are usually old male scientists. Representative heuristics are obviously logical mistakes, but they are usually used (Thaler & Sunstein, 2021a). For example, in Ghana, a person from the Asante ethnic group is usually presumed to support Kumasi Asante Kotoko football club, whilst a person from the Ga ethnic group is assumed to support Accra Hearts of Oak football club. These are merely fast inductive reasoning and not rational deductive reasoning (Kahneman, 2011; Thaler & Sunstein, 2021a).

2.5.4 Optimism and overconfidence

Humans are highly optimistic and confident in their abilities and potential, such that decisions are usually made along these lines. For example, drivers are likely to underestimate the chances of being involved in road traffic accidents, irrespective of how they overspeed and break traffic regulations. Similarly, people underestimate the likelihood of developing hypertension, diabetes, stroke, cancer, sexually transmitted infection, alcohol use disorders and other diseases, such that these optimisms influence health-seeking behaviours. Studies show that people can be unrealistically optimistic and overconfident even when the risks involved are high (Thaler & Sunstein, 2021a). This heuristic and source of error and bias in human cognition

[3] CRISPR is clustered regularly interspaced palindromic repeats, and Cas 9 is CRISPR-associated protein 9.

also accounts for some of the sources of vulnerability amongst research participants. For example, therapeutic optimism. This occurs when research participants have been adequately informed about the risks and benefits associated with participating in research, yet they rather expect and hope for personal benefits. As a result of this optimism, they choose to consent to be research participants (Horng & Grady, 2003).

2.5.5 Loss averse heuristic

Loss aversion states that people hate losses to a higher degree than they love gains. Dislike for losing is more likely to influence choices than the promise of gains. This was shown in the public policy that was aimed at decreasing the use plastic carrier bags. Two different policies were implemented. In one policy, buyers were given a small amount of money for bringing their own reusable carrier bags to carry their groceries. In the other approach, buyers who did not bring their own carrier bags were charged a small amount of money. Even though the money involved in the two approaches were the same, the second approach was successful in discouraging the use of plastics, and ultimately encouraged the use of reusable carrier bags. Furthermore, in a behavioural economics experiment, half of the students in a class were each given branded mugs. The other half were not given any mugs. The students with mugs were asked to sell their mugs to the students without mugs. It was noticed that students with mugs on average demanded twice as much as the average price that the other students were willing to offer. The experiment revealed that students with mugs valued what they were about to lose in sales, as compared to the students without mugs who were only about to gain mugs. Also, the students without mugs did not want to lose a lot of money. The aversion for loss is a heuristic that is also used by system 1 to make decisions (Thaler & Sunstein, 2021a).

2.5.6 Status quo bias

People have the tendency to remain with a default choice or situation. This is termed inertia or status quo bias (Thaler & Sunstein, 2021a). It has been found that people are less likely to make

choices contrary to a default option (Thaler & Sunstein, 2021a). For example, teachers know that students in a class where there is no prescribed seating arrangement tend to maintain the same seating position the entire semester (Thaler & Sunstein, 2021a). A study conducted into pension plans of university professors in the United States of America revealed that the median number of changes in asset location was zero, which meant that over the lifetime of over 50% of the participants there was no changes made to the allocation of their assets. Furthermore, married ones still had their mothers as beneficiaries of their pension plan because when they subscribed to the plan, they were single, and they never updated the plan afterwards (Thaler & Sunstein, 2021a). People are likely to stick to default settings of their cars, smartphones, or mobile applications, other than personalize the settings (Thaler & Sunstein, 2021a).

2.5.7 Social influence

Automatic systems are also influenced by perceived or actual behavior of other people. The desire to conform influences choices people make. For example, it was revealed that when some people in a group or society believe that others conduct themselves in a particular way (which could be false) they end up making choices to conform to that idea. This is termed as pluralistic ignorance. This could also be in the form of identity-based cognition where people make choices based on what the persons they identified with–age, gender, political ideology, culture, etc.– were seen or thought to be engaged in. An experiment conducted by Solomon Asch revealed that people rarely erred when they independently solved easy problems; however, when the research participants saw the answers provided by others, they were likely to err about one-third of the time. Further experiments revealed that people were likely to conform when they knew that they were being watched. Social influence has been found to impact decision making, even to the point of leading to errors (Thaler & Sunstein, 2021a).

These heuristics briefly discussed herein are error prone because they usually do not use adequate information to make decisions, and they do not employ logical or rational reasoning. They are easy to use because they are fast and require minimal cognitive stress. In the subsequent subsections, characteristic biases and errors of heuristics would be demonstrated with examples. Furthermore, how these biases and errors are exploited in the concept of Nudge theory to predictably influence human behaviour would be discussed in detail.

2.6 Bias and errors

The various mechanisms employed by system 1 in making decisions are fast, but they are prone to errors and susceptible to biases. However, system 1 is routinely used in decisions of daily living (Kahneman, 2011; Thaler & Sunstein, 2021a). Errors in automatic/fast cognitive systems are manifested, for example, in the persistence of sedentary living even in the presence of knowledge of the benefits of regular exercise, and the intention to exercise. Status quo bias makes it difficult to initiate regular exercise. Unrealistic optimism makes one underestimate the risk of developing hypertension, diabetes, and obesity even amidst persistent sedentary life. The aversion for losing money from subscribing to a gym, and the social influence from presence peers who neither exercise nor eat healthily, influence the decision of a person who ordinarily is aware of the health benefits of regular exercise and healthy diet, and who also has also the intention to change for the better. Studies have shown that in the United Kingdom, about 90 percent of respondents wanted to donate their organs, yet as low as about 40% had registered to be donors. Also, in the United States of America, about 70% of people preferred to donate their organs for transplantation, but only 30% had registered to be donors (Gill, 2004; Thaler & Sunstein, 2021a; Wolf, 2022). Wide intention-behaviour gap, and the persistent *non-rational* choices of humans, contributed to the proposition of the concept, bounded rationality (Aumann, 1997; Reinhard Selten, 1990, 2001; Thaler & Sunstein, 2021a). According to the

concept of bounded rationality, humans are not fully rational decision makers as neoclassical perspective of economics have long proposed. Neoclassical position intimates that humans are rational decisionmakers, and choices are made to maximize utility. Behavioural economics rather posits that human choices do not always maximize utility, hence, there is another factor that influences rational decision-making. The difficulty in making rational decisions or maximizing utility is always the bedrock of bounded rationality. Human cognitive system is, therefore, partially rational, and that is what is termed as bounded rationality (de Quintana Medina, 2020; Thaler & Sunstein, 2021a).. Richard Thaler and Cass Sunstein termed fully rational human being, or the human being as perceived by neoclassical standards of economics as *Homo economicus*; whilst humans with bounded rationality, or humans as perceived by behavioural economics as *Homo sapiens*. *Homo economicus*, a fully rational human being, is merely a utopian conceptualization of human as rational beings by neoclassical economic theories (Thaler & Sunstein, 2021a). This means that humans ordinarily and practically err in our choices due to routine use of heuristics and biases originating of system 1 (or fast/intuitive/automatic system), which is error prone (Sunstein & Thaler, 2003; Thaler & Sunstein, 2021a). Nudge theory is designed for *Homo sapiens* and not *Homo economics*. Nudge theory is designed for person who inadvertently err in decision-making, such that choices made do not lead to their welfare (de Quintana Medina, 2020; Thaler & Sunstein, 2021a).

2.7 Nudge theory

Nudge theory, also known as libertarian paternalism, is based on the understanding of bounded rationality (Sunstein & Thaler, 2003; Thaler & Sunstein, 2021a). It states that because of bounded rationality and tendency to err of *Homo sapiens*, people *can* be influenced to make certain predictable choices by exploiting heuristics and biases of system 1. This is done through altering or reorganizing the options available to an individual, or the context within which

choices are made, in such a way that predictable decisions are freely made using system 1. The person is not coerced into making any specific choice, but rather s/he is allowed the freedom to choose in a purposefully designed choice environment (or choice architecture). Herein lies the alternative name for nudge theory: libertarian paternalism. *Libertarian*, because freedom of choice is maintained; and *paternalism*, because one is influenced by a choice architect to make predictable decisions using subtle tools. The one who designs the choices is called a choice architect, and the reorganized choices are termed as choice architecture. The desired and predicted choice of the choice architect may be to the welfare of the agent. Thaler and Sunstein, therefore define choice architect as "[one who] has the responsibility for organizing the context in which people make decisions" (Thaler & Sunstein, 2021, p. 3). They further compare choice architecture to the architectural design of buildings. They argue that no matter how lay or trained a building's architect may be, a building will have architecture. There was no such thing as a building without a design. They said that,

> "There are many parallels between choice architecture and more traditional forms of architecture. A crucial parallel is that there is no such thing as a 'neutral' design. Consider the job of designing a new office building. The architect is given some requirements… Hundreds of other constraints will be imposed–some legal, some aesthetic, some practical. In the end the architect must come up with an actual building with doors, stairs, windows, and hallways. As good architects know, seemingly arbitrary decisions such as where to locate the bathrooms, will have subtle influences on how the people who use the building interact. Every trip to the bathroom creates an opportunity to run into colleagues (for better or for worse). A good building is not merely attractive; it also 'works'" (Thaler & Sunstein, 2021, p. 4)

An experiment conducted in the cafeteria of some schools noticed that the choice between healthy and unhealthy foods by the schoolchildren was influenced by the arrangement of the

foods in the cafeteria. Foods that were placed at eye level were likely to be selected by the children, whether they were healthy or not. Foods that were displayed first in the linearly arranged foods were likely to be selected over the foods placed at the rear. Merely arranging available food, yet allowing children to freely choose, a choice architect was able to influence predictable decision-making (Sunstein & Thaler, 2003; Thaler & Sunstein, 2021a). A nudge, therefore, is:

> "…any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not taxes, fines, subsidies, bans, or mandates. Putting the fruit at eye level counts as a nudge. Banning junk food does not (Thaler & Sunstein, 2021a, p. 8)."

Considering the vulnerability of human cognitive system to subtle influences, and the plurality deliberate and inadvertent nudges in our choice architecture, there is no nudge-neutral context. The sociocultural and political environment within which choices are made may play the of role social influence. Existent national pension scheme, and national health insurance schemes play the role of default choices that influence people to be bias in favour of the status quo (Sunstein & Thaler, 2003; Thaler & Sunstein, 2021a). A choice architect, as defined hereinbefore as a person or institution responsible for designing a choice architecture within which people make decisions; anyone who presents another person with choices, inevitably and invariably becomes a choice architect. There is a false assumption that people make decisions that are always in their own best interest, hence there is no need for a choice architect to design a context (choice architecture) in such a way to make predictable choices that would be in their[4] own best interest: paternalism. There is also a misconception that one can choose

[4] The person making the decision.

not to influence (nudge) the choices of people. This is impossible because every context has one nudge or the other. Thaler and Sunstein rightly intimate that "[in] countless situations, some organization or agent must make a choice that will affect the behaviour of some other people. There is, in those situations, no way of avoiding nudging in some direction, and these nudges will affect what people choose. Choice architecture is evitable" (Thaler & Sunstein, 2021a, p. 14). There is another misconception that paternalism always manifests as coercion. In the cafeteria experiment described hereinbefore, a choice architect that rearranges the foods such that schoolchildren are more likely to select healthy diet is acting in a paternalistic way, yet it is anything but coercive. Nudge theory brings together libertarianism and paternalism in such a way that brings to light the idea that paternalism is not equivalent to coercion, and libertarianism does not preclude assistance. Nudge theory allows a choice architect to influence decision-making to the best interest of person who would have ordinarily made bad choices due to bounded rationality, and an already nudge-prone choice architecture (Thaler & Sunstein, 2021a). Some tools or elements have been designed in line with Nudge theory, to be included in choice architecture to influence decision-making. These are called nudges, or nudge elements. In the subsequent sub-sections, some nudge elements would be explained, including how they operate.

2.7.1 Justification for Nudge theory tools

Choice architects have a set of tools available to nudge people into a choice architecture. These tools operate by exploiting the heuristics and biases of system 1. Thus, the predictability of system 1 and its errors make them sensitive to nudges. Examples of libertarian paternalism tools are reminders, checklist, frames, and others (Thaler & Sunstein, 2021a). Some of the tools are briefly discussed below.

2.7.1.2 Spacing out

Man's tendency to forget details has warranted the need for nudge tools like reminders, prompters, and checklists. For example, some surgeons have been found to forget to follow perioperative aseptic techniques, and this has resulted in postoperative infections. Some surgeons also forget and leave behind gauze and surgical instruments in the abdomen of patients, leading to gossypiboma (Alemu & Tiruneh, 2020). Some perioperative nurses during surgery serve as reminders to surgeons, and their role is also complemented by institutional checklists. These reminders and checklists have been shown to decrease the incidents of postoperative infections and gossypiboma. Also, prompters have been included in Gmail to remind users to attach documents whenever they forget, though they (users) have indicated in the body of their email that documents have been attached (Thaler & Sunstein, 2021a).

2.7.1.3 Benefit now, cost later

Challenges with self-control arise when people can make decisions of pleasure in the present but bear the cost later in future. Situations like this are tempting, and people easily fall for them to make choices consequently diminishes their welfare and minimizes their utility. For example, alcohol abuse, narcotic drugs abuse, cigarette smoking, casual unprotected sex, binge watching of television series, gambling, persistent intake of junk foods, and others provide pleasures in the present but cause significant cost to physical health later in the future. Because of this, nudge elements have been used to save people from temptations. In the USA, persons dealing with gambling addiction can voluntarily place their names on the state's list of people who are banned from casinos for various reason. They are unable to purchase entry fees, and they are also not allowed entry. This simple act of adding one's name to the registry creates a form of artificial status quo and an impediment (sludge) that influences their choice to return to the casino to gamble. A sludge is thick, soft, wet mud or similar semisolid mixture like a byproduct of industrial process. This term was adopted by Thaler and Sunstein to mean

unassuming procedural inconveniences placed in the way of people, to subtly influence their choices. For example, countries that want to reduce immigration institute long, tortuous, and unforgivingly strict processes, which require completion of bulky forms. Sometimes, the mere procedural requirement of driving to the office of the service provider can be a nudge in the form of a sludge. Humans ordinarily prefer the path of least resistance. Hence, putting together a default in the form of denial of entry, and sludge in the form of going to the office to follow long procedures to be re-allowed entry into the casino help nudge people to make decisions of self-control (Thaler & Sunstein, 2021a).

2.7.1.4 Degree of difficulty

Humans usually do not err when navigating through relatively easy problems. When a problem is within one's expertise, it is easily solved correctly. Sometimes, when a problem is more difficult and complex, such that, without assistance or extra expert information, one may not be able to solve the problem, heuristics come in handy. Hence, in situations like this, people are likely to use error prone automatic system, which may not be in their best interest. Tools like framing and smart disclosure have been used to influence decision-making. For example, instead of the expression, eye donation, which has been shown to be associated with 'ick factor' (repulsion/disgust response) and low consent to be a cadaveric organ donor; the expression, ocular donation is preferred during informed consent process. The latter is not associated with repulsion, and there is a relatively higher donation rate. Merely changing the terminology in consent process improved deceased organ donation (Bramstedt, 2022). Interestingly, ocular donation technically refers to cornea donation, and the procedure does not involve removal of the entire eye. Hence, the ick factor that characterizes eye donation leads to erroneous choices, especially in kinsmen or potential donors whose authentic choice is to respectively donate a deceased relative's cornea or their own cornea after death. Smart disclosure is also used to help consumers who are interested in specific pieces of information about a product so that they do

not miss them. For example, by presenting some texts as bolder or larger than others, consumers are likely to consider that information to be important; whilst by presenting a particular information in smaller sizes, consumers are likely to be nudged away from those pieces of information (Thaler & Sunstein, 2021a).

2.7.1.5 Frequency

Persistent practice has been shown to make one perfect. However, some life-changing decisions rarely occur such that people do not get the opportunity to practice being perfect in making those decisions. For example, decisions about being a living donor or a deceased donor are not frequently made for one to be perfect in making that decision. Hence, such circumstances are perfect for nudge to help people avoid making decisions that are not in their authentic choice (Thaler & Sunstein, 2021a).

2.7.1.6 Feedback

Some life decisions do not come with feedback. Such circumstances do not provide decisionmakers with the opportunities to assess the correctness of their choices. Hence, inclusion of a feedback in some situations helps decisionmakers to stick to a particular behaviour (Thaler & Sunstein, 2021a). This is also termed as gamification (Kwan et al., 2020a). For example, inclusion of feedback about calories lost help nudge people to use smart treadmills to exercise (Kwan et al., 2020a; Thaler & Sunstein, 2021a).

2.7.1.7 Knowing what you like

Sometimes it is difficult to know what one likes. Some authors term what one truly likes as authentic or preferred choice. This happens especially in situations where one is unable to mentally translate choices into experience. For example, when a patient is reflecting on whether to consent to a below-knee amputation as treatment for a diabetic foot ulcer, the patient may not be able to adequately contemplate living without a foot, since s/he has never had that experience. Hence, due to the understanding of the current best practice, and the appreciation

of the average best interest of patients, patients can be nudged away from making decisions that are not in their best interest. This is far from manipulation, because studies have shown that persons who know their authentic choices, or persons who have an ideological abhorrence of a particular surgical procedure (or therapy) do not consent in the direction of the nudge (Thaler & Sunstein, 2021a).

2.8 Nudge theory and organ donation

There are different tools of libertarian paternalism that have been used in USA, Spain, United Kingdom, Italy, Israel, and several other advanced countries, which are aimed at bridging organ demand and supply gap. The first but not necessarily the most appropriate tool is routine removal. Policy makers institute a default rule that allows trained healthcare professionals to remove organs without any consent from the deceased or the family. Cornea is one tissue, which is harvested through default routine removal. In the United States of America, medical examiners in some states were once allowed to routinely harvest cornea when performing autopsies. This approach significantly supplied cornea for corneal transplant. For example, in Georgia, corneal transplants increased from 25 to over 1000 between 1978 and 1984 (Thaler & Sunstein, 2021b). Another nudge element used in organ donor recruitment is presumed consent or opt-out approach. European Union and the United Kingdom used to operate opt-in policy (would be discussed very soon) (Zambrano, 2018), however, the policy has been reviewed and presently, they operate opt-out policy (Wolf, 2022). In fact, considering specific details in Europe, Spain was the first country to operate presumed consent policy, and this was in 1979 (Thaler & Sunstein, 2021a). Wales was the first country to try presumed consent policy in the UK in 2015 (J. Miller et al., 2020), after which Scotland and England implemented it in 2020 (Wolf, 2022). According to presumed consent as organ donor recruitment policy, a deceased potential donor is presumed to have consented to organ harvesting unless there was

evidence of explicit disapproval, which was either documented when the person was alive, or communicated to relatives or close associates. In line with the latter alternative, the family may communicate their disapproval of the organ harvesting, according what they believe would be in the best interest of their deceased kin (Gill, 2004; Prabhu, 2019; Thaler & Sunstein, 2021b).[5] Presumed consent/opt-in as a nudge element exploits inertia/status quo bias inherent in automatic cognitive system, because a few people go through the laid down procedure to explicitly opt out of organ donation. There are two kinds of presumed consent: hard and soft. Under hard presumed consent policy, it is not obligatory to consult or inform family members of the deceased potential donor about the decision to harvest organs of their deceased kin. In addition, neither their disapproval nor approval would influence the decision to harvest the organ, because the only disapproval that is accepted is the one from the potential deceased donor when s/he was alive. Countries like Austria, Singapore and Sweden are known to operate hard presumed consent policy. Interestingly, though the law stipulates hard presumed consent, the healthcare professionals still consider the perspective of the family members of the potential deceased donor: *soft* presumed consent in practice (Thaler & Sunstein, 2021, p. 273). Also, in as much as presumed consent has been implemented in many European countries, a few practice hard presumed consent (Thaler & Sunstein, 2021, p. 262). Under soft presumed consent policies on the other hand, clinicians would not proceed with organ harvesting, if next of kins (spouse, children, or parents) disallows the procedure (Thaler & Sunstein, 2021, p. 262). In both hard and soft presumed consent, the family may be informed about the procedure, since the default is the organ harvesting unless the potential deceased donor opted-out when s/he was alive usually via an advanced directive (in the case of both hard and soft presumed consent), or family opts out (in the case of soft) (MacKay & Robinson, 2016; Thaler & Sunstein, 2021b).

[5] The disapproval of relatives is not always accepted. This is because in hard presumed consent, a kind of presumed consent, the disapproval of the family of the deceased potential donor is not considered.

Another recruitment strategy using nudge element is explicit consent/opt-in. This requires that potential deceased donors provided explicit consent when they were alive before organs can be harvested. Opt-in policy is in principle and practice different from the traditional informed consent policy. United States operates opt-in policy, though some states like Illinois and New York operate mandated choice policy, which would be discussed shortly. Under opt-in policy people merely need to opt-in to be registered as organ donors without necessarily in going through an informed consent process (Thaler & Sunstein, 2021, p. 264; Zambrano, 2018). For example, people may just tick on driving licensing forms or health insurance forms, or pop-ups on internet. Proponents argue that state uses the media to educate people, hence the casual and easily ticking on forms is a follow up on the education that was done on television or radio (Thaler & Sunstein, 2021b; Zambrano, 2018).

Another nudge is prompted choice. This approach takes cognizance of human tendency to forget, hence the need for reminders. These reminders can also serve as anchors to exploit system 1. In prompted choice, different tools are used to frequently remind people to register as deceased organ donors. These reminders can be television/radio adverts or registration booths at sports stadia where it would be easy to catch the attention of people and get them to register, especially persons with the intention to register but for inertia, they have not implemented their intentions. Bringing registration booths closer to people is an attempt to remove sludge in registration process, thereby exploiting path of least resistance heuristic (Thaler & Sunstein, 2021, p. 265). Therein prompted choice are two other nudge tools–framing and social influence– that can be used in synergistic and complementary way. For example, reminders in the form of adverts or text messages that state that 80 percent of Ghana's

Blackstars[6] have registered to be deceased organ donors is likely to nudge other footballers who would want to join the national team, and fans of these football players to register as organ donors. This approach will be more effective, if it is indeed true that about 80 percent of the players have registered as donors: transparency, not opacity helps libertarian paternalism. The reminder has also exploited framing by choosing not to say that 20% of sportsmen and sportswomen have *not* registered. This wording would nudge people away from registering. Furthermore, by choosing sports personalities, social influence tool in the form of identity-based cognition has been used (Thaler & Sunstein, 2021b). Another tool of nudge theory is mandated active choice (MAC). Under mandated active choice policies, people are *required* by procedural regulations in circumstances like registering for/renewing driving license, to choose to register to be an organ donor or not. The choice one makes does not affect the outcome of the licensing process, even though deciding on one's donor status is merely a *simple* mandatory step. This approach is like how it is mandatory to accept, reject or personalize internet cookies when one visits some websites. In fact, the dialog box containing the cookies is sometime positioned to prevent seeing the content of the website: a sludge (a nuisance). To remove the dialog box, users must accept default settings, reject default settings, or personalize the settings. Humans a prone to status quo bias, and typically choose the path of least resistance. Therefore, users are likely to accept the default settings without even reading what is contained in them. Interestingly, to further enhance the sludge in internet cookies, the reject option is usually obscured, or they lead to cumbersome steps on other websites. A contrasting approach is voluntary active choice (VAC), which, unlike MAC does not mandate that a decision be made on donor status, however, one can choose not to decide at all. Thus, under MAC the options are *yes* or *no*, but under VAC they are, *yes* or *no* or *next time*. Both MAC and VAC can be complemented with smart disclosure such that *YES* is boldened and highlighted in bright

[6] Blackstar is the name giving to the Ghanaian senior national football team.

colours, whilst *no* and *next time* appear in smaller font sizes, dull colours, obscured places, or sometimes requiring completion of lengthy questionnaires.

Another nudge element for organ donor recruitment is the use of incentives (Thaler & Sunstein, 2021, p. 271). This approach is different from the organ market system. Under incentive as nudge, people may be informed that registering as a deceased organ donor comes with benefits such as being considered on top of the waiting list in case one happens to need organ transplant (Thaler & Sunstein, 2021b). Incentives could even be free mortuary services when one dies. Persons who refuse to register as organ donors may also be placed at the bottom of the list if they or their unregistered donors need organ transplant. Tools of nudge theory are not necessarily used in isolation. They can be used in conjunction with other traditional organ donation modalities likes voluntary/altruistic organ donation, or organ market system (Qurashi, 2021; Rodrıguez-Arias & Morgan, 2016; Thaler & Sunstein, 2021a)

CHAPTER THREE

3.0 METHODOLOGY

Adopting a comparative analysis approach (Coleman, 2017), I aimed to explore and evaluate ongoing debate surrounding ethical basis of organ donor recruitment systems in Europe, America, and Middle East. I then contextualized the concepts within the Ghanaian sociocultural and bioethical milieu. The following keywords were used to search for related articles from Google Scholar and the National Center for Biotechnology Information (NCBI) also known as PubMed:

"Bounded rationality,"

"Nudge theory,"

"Libertarian paternalism,"

"Organ donation,"

"Organ transplantation."

The book titled, *Nudge: The Final Edition*, by Richard H. Thaler and Cass R. Sunstein was purposefully selected as part of the literature because it was the current edition of the original work, *Nudge, Improving Decision About Health, Wealth and Happiness,* where the concept or the Nudge Theory was first proposed. Using Caesar Atuire and colleagues' African normative framework of health (Atuire et al., 2020), and Jennifer Ruger's framework (Ruger, 2006), which combined Aristotle's political theory (Ruger, 2006), Amartya Sen's Capability Approach (Robeyns, 2005; Sen, 1985), and Cass R. Sunstein's Incompletely Theorized Agreements (ITA) (Sunstein, 1994); nudge theory in organ donation, voluntary organ donation, and organ market were analyzed. The various recruitment strategies were assessed to determine whether they agreed with African normative framework and capability approach. After which incompletely theorized agreement was used to determine the most appropriate strategy, based on organ transplant-related capabilities. The frameworks and theories that were used in the

analysis are explained in detail herein, including the reasons behind selecting them. In addition, the approach to which these frameworks and theories were used to explore how well the various organ donor recruitment strategies interact with African moral thought are also explained.

3.1 African normative framework

Preamble: *In this section, the theoretical underpinning of African normative framework as proposed by Atuire and colleagues is unpacked to further explain the rationale behind the normative framework, and how it was used to explore the ethical justifiability of various organ recruitment strategies outlined in this thesis.*

- ***Why:*** *This normative framework was purposefully designed by Atuire and colleagues using African moral philosophy to guide healthcare practice and health policy decision-making in Ghana and sub-Saharan Africa, in the light of the limitation of Western moral thought in adequately regulating healthcare in African context.*
- ***How:*** *Various organ donor recruitment strategies were unpacked and juxtaposed against underlying philosophies therein the framework–ontological communitarianism, empathetic humanism, and virtuous character. Recruitment strategies that were found to be practically and theoretically explainable and justified by the normative framework were considered to be in sync with African moral philosophy and Ghanaian sociocultural context. Also, recruitment strategies were unpacked to ascertain whether their theory and/or praxis incorporated a form of relational conceptualization of personhood, and dual conceptualization of moral status. That is, were the strategies considering both rights and responsibility equally. Strategies that were found to be explained by African moral thought of personhood and moral status were considered to be in sync with African moral philosophy and Ghanaian sociocultural context.*

African societies are diverse across the continent, and within individual African countries (Atuire, 2022; Coleman, 2017). This sociocultural diversity creates a challenge for lump sum adoption of ethical theories and frameworks from Western moral thought. Anglo-American moral thought uses individual-centered approach to moral reasoning, and individual rights are central to Western moral reasoning. Application of Western moral thoughts like *principlism*, Kantian deontology, and utilitarianism/consequentialism have been argued to be devoid of substantial cross-cultural importance in the African context (Atuire, 2022; Coleman, 2017; Metz, 2010). Furthermore, though African moral thought does not necessarily consist of African-only concepts, it consists of concepts that are salient to the diverse African sociocultural and historical context (Metz, 2010). Also, African conceptualization of health, considers sociocultural and spiritual ramifications in addition to biomedical science (Laar et al., 2021). This means that public health policymakers must consider how the unique Ghanaian and African view of health and healthcare when instituting public policies and bioethics frameworks and guidelines. African moral thought, including African perspective of health is intricately connected to African conceptualization of personhood, and this is explained in the next subsection. In conducting this research, various organ donor recruitment strategies were analyzed from how they incorporated African concept of personhood into the fundamental building blocks of the strategy.

3.1.1 Personhood in African moral thought

African moral thought is fundamentally derived from a descriptive and normative conceptualization of personhood (Metz, 2010). A human person is therefore defined in a relational, communal, and normative perspective (Atuire, 2022; Atuire et al., 2020; Gyekye, 2013). Describing a person in African context is usually in relation to other entities: family,

society, ancestors, and the divine (Abraham, 2015; Atuire, 2022; Atuire et al., 2020; Gyekye, 2013). Personhood is thus derived from these core components. The meaning of a person is derived from the family, society, ancestors and divine, and the essence of these are also derived from their existence of the individual person. Personhood has a communal conceptualization, which posits that a person owns the human society a responsibility to secure and enhance harmony; and society/community also owns the person protection of his/her welfare (Metz, 2010). This brings to light the balance between rights and responsibility in the relational and communal conceptualization of personhood in Africa. This is epitomized in the Ubuntu philosophy that intimately connects 'I' to 'We', and vice versa, in such a way that the ontology and welfare of each depends on the other (Metz, 2010). Lastly, though not overtly evident in Ubuntu philosophy, or the relational conceptualization of person, the other arm of personhood in African moral thought is normativity of personhood (Atuire et al., 2020). A salient component of African languages is the absence of a word for morality; however, morality is expressed in aesthetic description of personhood. For instance, amongst the Akan, a morally sound person is described as *a human* or a *person: "Ɔyɛ onipa."* The person can also be described as having a beautiful or attractive character: "*Ne suban ɛyɛ fɛ."* Morals and personhood are inseparable in the African sociocultural context. This also draws African moral thought closer to virtue ethics (Atuire, 2022; Atuire et al., 2020; Gyekye, 2013). Another approach to describing a morally sound person in African moral thought is a duty-based approach (Gyekye, 2013; Metz, 2010). This approach is not merely a rule-based approach, but one that stipulates that a person is duty-bound to ensure friendship and harmony within the community, and to provide others with the opportunity to be good. For instance, a person who sows discord, or leads others astray is not considered to *have character*, or *to have a beautiful character*, or *to be human/person* (Abraham, 2015; Gyekye, 2004, 2013).

The tendency to presume that African moral thought relegates individuality to the background is high, however, African folktales, proverbs, and philosophies point towards a moral philosophy that acknowledges both the individuality and the community. This is the dual conceptualization of personhood (Atuire, 2022; Atuire et al., 2020). For example, an Akan proverb says that a closer look at a forest reveals that it is made up of individual trees. An Akan Adinkra symbol,[7] which also describes conjoined crocodiles who are joined at the abdomen says that no matter the mouth through which food enters the conjoined crocodiles, it ends up in the same stomach. Lastly, family lands are in the custody of the family head or the chief, yet each individual family member is allowed exploit the land and make individual wealth, taking cognizance of communal ownership of the land (Abraham, 2015; Gyekye, 2013). Based on the relational, communal, and normative conceptualization of personhood, and the equal cognizance that is given to both individuality (rights) and communality (responsibility) in African moral thoughts, the various organ donor recruitment strategies that were considered in this thesis were analyzed based on how they focused on both the individual and the community.

3.1.2 Dual conceptualization of moral status

The relational and communal conceptualization of personhood and its normativity in African moral thought has been exploited to propose a dual conceptualization of moral status (Atuire, 2022). Moral status proffers moral consideration unto an entity during decision-making (Jaworska & Tannenbaum, 2021). Thus, an entity with moral status needs to be considered when a decision is being taken. Moral status in African moral thought is, therefore, categorized into object moral status (OMS) and subject moral status (SMS) (Atuire, 2022). An entity is said to have object moral status when it is owned a duty to be considered in moral decision-making. This conceptualization is important because sometimes it is not dependent on mental capacity

[7] Adinkra symbols are Akan cultural symbols, which convey the ethos of the people. It is a rich source of information for Akan moral philosophy.

or capacity to form human relationships, for example, in unconscious persons or mentally incapacitated persons. Object moral status alone does not grant full moral status, but rather a partial moral status. The second arm of dual conceptualization of moral status, subject moral status, says that one has a responsibility to others to consider their moral status. Hence, from the dual conceptualization of moral status, a person with full moral status is owned a duty by others to be considered in moral decisions, and the former also owes others the same responsibility (Atuire, 2022).

3.1.3 African moral thought for healthcare

Based on the conceptualization of personhood and moral status in African moral thought, Atuire's *African normative framework* seeks to resolve ethical tension in healthcare, especially within the African context, taking cognizance of salient African sociocultural features. According to the framework, there are three arms that flow into each other: ontological communitarianism, empathetic humanism, and virtuous character (see figure 2). Ontological communitarianism, as discussed hereinbefore, personhood is relational and communal, and the welfare of an individual is the welfare of the society, and vice versa. This dovetails into the second arm that requires that healthcare professional and public health policymakers seek the best interest of others through empathy and appreciation of the reciprocity therein promoting man's (or woman's) best interest. Lastly, as African moral thoughts conceptualize morality in both duty to the community, and virtuous character, the third arm of the African normative framework proposes that healthcare professionals develop an ethical character and professionalism that allows them to be capable of resolving novel ethical tensions (Atuire et al., 2020). In analyzing the various organ donor recruitment strategies, they were unpacked in such a way to demonstrate whether their operationalization could be explained by the three arms of the normative framework – ontological communitarianism, empathetic humanism, and virtuous character. Capability approach, and incompletely theorizing agreements were used to

further assess whether the recruitment strategy improved right and access to health. Capability approach and ITA are explained in detail in the subsequent subsections.

Figure 2

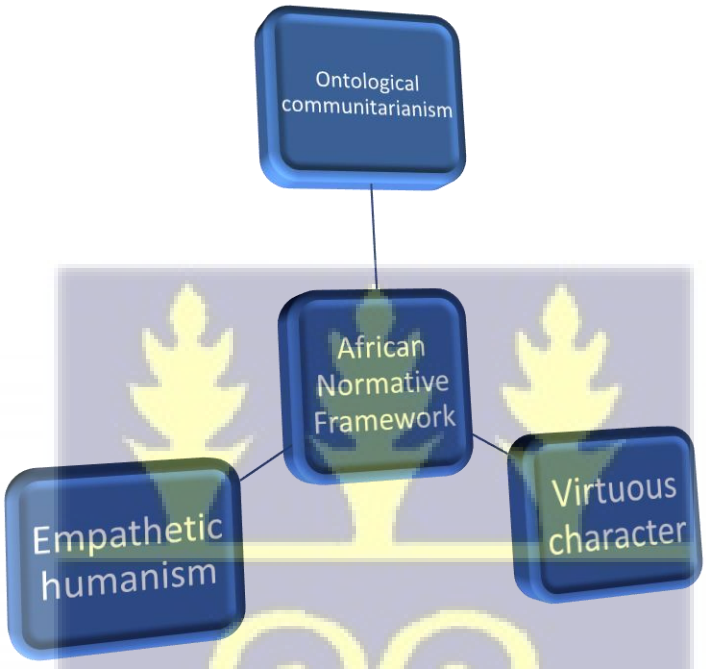


Figure 2: Caesar Atuire's African normative framework, which is derived from relational conceptualization of personhood and dual conceptualization of moral status in African moral thought, consists of three arms: ontological communitarianism, empathetic humanism, virtuous character (Atuire et al., 2020).

3.2 Capability Approach and Incompletely Theorized Agreement

Preamble: *In this section, capability approach, and incompletely theorized agreements (ITA) are unpacked in detail to demonstrate the theoretical underpinning of use in health policy decision-making, and finally how they were used in this thesis.*

- ***Why:*** *Jennifer P. Ruger's framework, which combined capability and approach and incompletely theorized agreement was meant to assist in health policy decision-making in such a way that everyone, especially vulnerable persons would be able to make their*

own health-related decisions freely to achieve their own desired state of health. Also, it guides policy makers on how to set agenda even amidst plurality of aspirations.

- ***How:*** *Various organ donor recruitment strategies were assessed based on how their practical implementation could be explained by capability approach and incompletely theorized agreements approach to health policymaking. Capability approach requires that health policies are designed in such a way people (irrespective of degree of vulnerability) can desire their preferred health, and the policy meets everyone at their point of limitation to allow conversion of desires to attainment. Incompletely theorized agreement also focuses on the bigger picture of the desired outcome, and then selects the most preferred outcome amidst plurality of disagreements of over abstractions. These two tools were used to explore which of the organ donor recruitment strategies incorporated various kinds of vulnerabilities and limitation in their operationalization and included measures to ameliorate the barriers to achieving individuals' desired choices. In the context of thesis, the desires of interest are the desire to donate one's organs for transplantation or become a registered deceased organ donor; the desire to decline to be an organ donor; the desire to narrow intention and behaviour gap; and lastly the aim to narrow organ demand and donation gap. The theory Incompletely theorized agreements was also used in this thesis to select the most appropriate organ donor recruitment strategy, after the strategies had been evaluated with African normative framework and capability approach.*

Access to healthcare has conventionally been used as the measure of improved health, however, this is an insufficient tool because access to healthcare does not necessarily commensurate into improved health (Ruger, 2006). The right to health ought to be the most appropriate measure of assessment because the aim of accessibility to healthcare and all that there is, is the

attainment of health. To achieve right to health, a framework was developed from Amartya Sen's *Capability Approach* and Cass R. Sunstein's *Incompletely Theorized Agreement* (Ruger, 2006).

Capability approach is derived from Aristotle's concept of human flourishing (Birsch, 2014; Ruger, 2006). According to Aristotle, the aim of political activities is to achieve human flourishing. Thus, every person must be provided with a conducive environment to be able to make decisions freely and reasonably to ensure that one flourishes. Martha Nussbaum also termed this as capability to freely choose to function (Ruger, 2006). In fact, this conducive environment to freely make choices is not an end in itself, but rather a means to achieve the *ultimate* goal, human flourishing or function (Ruger, 2006). The plurality of human interests reflects in the diversity of what is considered ultimate good, human flourishing or function. Political activities ought to ensure that everyone freely chooses what amounts to each person's ultimate good. However, sometimes public policy decision-making encounters challenges on which ultimate good to promote. Nonetheless, Aristotle argues that a combination of practical wisdom or prudence with proportional justice should be used to decide on the most appropriate public choice to make. Proportional justice argues that equals ought to be treated equally, and unequal ought to be treated unequally (Ruger, 2006).

Capability approach is a normative framework that evaluates the interaction between wellbeing and environment (personal, social, and cultural), policies, and resources. It also assesses how aspirations are achieved. Ingrid Robeyns defines capability approach as, "…[A] broad normative framework for the evaluation and assessment of individual well-being and social environments, the design of policies, and proposals about social change in society" (Robeyns, 2005). Sen argues that in evaluating policies, the focus ought to be placed on how people could

freely choose to attain their desired aspiration (Robeyns, 2005; Sen, 1985). Distinction is placed between the *potentials* of people (where they would want to go and what they would want to be), and the achievement of people. The former is termed as *capabilities*, and the latter is termed as *functionings* (Robeyns, 2005). According to Sen there are three factors that influenced the conversion of capabilities into functionings. These are personal conversion factors, social conversion factors, and environmental conversion factors. Personal factors include educational level (or level of literacy), physical condition (for example persons with disabilities), gender, and other characteristics or identifiers of individuals. Social conversion factors include public polices, sociocultural norms, discriminating practices, gender roles, and other social practices and beliefs. Environmental conversion factors include climate, geographical location, road networks, and others (Robeyns, 2005). Furthermore, Martha Nussbaum provided a mutable list capability which include life, bodily health, bodily integrity, senses, imagination and thought, emotions, practical reason, affiliation, play, control over one's environment, and other species (Nussbaum, 1997; Robeyns, 2005). Though Sen did not subscribe to a limited list of capabilities (Nussbaum, 1997; Robeyns, 2005), but one that is open for cross-cultural review, capability approach proposes that policy makers consider the influence of conversion factors on policies in ensuring that people are free to choose their aspirations and achieve them (Robeyns, 2005).

According to Sen, people ought to be provided with the resources that would help them freely make choices to achieve the health they seek and envision (Ruger, 2006). For example, when two persons who have individually undergone unilateral below knee amputation choose between prosthetic leg and wheelchair, the difference between the reasons behind their choices should not be lack of resources to support their authentic choices, but rather their unique and individual perspectives of what is good function or human flourishing. Public policymaking

may require selecting which human function to promote. This creates a challenge; however, comparative valuation of the human functions is suggested to aid in the selection (Ruger, 2006). Incompletely theorized agreement (ITA) comes to aid decision-making in the context of plurality of capabilities. ITA was proposed by Cass R. Sunstein (1994) to demonstrate the framework the underlies the reasoning of judges, and it argued that amidst a myriad of disagreements, a focus on outcome and not high-level abstraction could lead to agreement. Sunstein intimates that,

> "When they disagree on an abstraction, they move to a level of greater particularity. The distinctive feature of this account is that it emphasizes agreement on (relative) particulars rather than on (relative)abstractions. This is an important source of social stability and an important way for diverse people to demonstrate mutual respect,10 in law especially but also in liberal democracy as a whole" (Sunstein, 1994).

There are three variants of incompletely theorized agreements. These are incompletely specified agreements, incompletely specified and generalized agreements, and incompletely theorized agreements on particular outcomes (Ruger, 2006; Sunstein, 1994). In incompletely specified agreements, people agree on the fundamental general abstractions and principles, however they disagree on their application in particular cases. For example, people may agree that murder is wrong, but may disagree on whether abortion is acceptable or not. Incompletely specified and generalized agreements occurs when people agree on mid-level principles but disagree on the fundamental general principles and the application of the mid-level principles in particular cases (Sunstein, 1994). In a health-related example, Ruger explains that people may agree on universal health coverage, but not on the entire theory of equality, and the plan to execute universal health coverage (Ruger, 2006). Lastly, incompletely theorized agreement on particular outcomes occurs when people agree on the outcome of particular cases, but not the low-level principles from which the outcome came from. This means that different low-

level principles may result in the same outcome (Sunstein, 1994). Considering incompletely theorized agreements, the objective in ensuring social stability and agreements could be achieved by focusing on particulars outcomes, and not the disagreements over abstractions. Sunstein intimates that,

> "What I am emphasizing here is that when people diverge on some(relatively) high-level proposition, they might be able to agree if they lower the level of abstraction. People are sometimes able to converge on a point of less generality than the point at which agreement is difficult or impossible. In law, the point of agreement is often highly particularized–absolutely as well as relatively–in the sense that it involves a specific outcome and a set of reasons that typically do not venture far from the case at hand" (Sunstein, 1994).

This approach is essential because sometimes these disagreements need not necessarily be resolved before public policies are decided on and implemented (Ruger, 2006). The theory of incompletely theorized agreements was used in this thesis to select the most appropriate organ donor recruitment strategy, after the strategies had evaluated with African normative framework and capability approach. In the context of thesis, the capabilities of interest are the desire to donate one's organs for transplantation or become a registered deceased organ donor; the desire to decline to be an organ donor, the desire to narrow intention and behaviour gap, and lastly the aim to narrow organ demand and donation gap. Sen's capability approach stipulates that a policy must be such that the conversion factors are enhanced such that capabilities becomes functions. Sunstein's incompletely theorized agreement (specifically on particular outcomes) also was used to reveal that though people may disagree on the abstractions – theories and frameworks of ethics, and bounded rationality and *unbounded* rationality debate – but they would agree on the particular capabilities outlined. Based on the

incompletely theorized agreements on the particular outcome, the most appropriate organ donor recruitment strategy (or strategies) was identified.

Figure 3

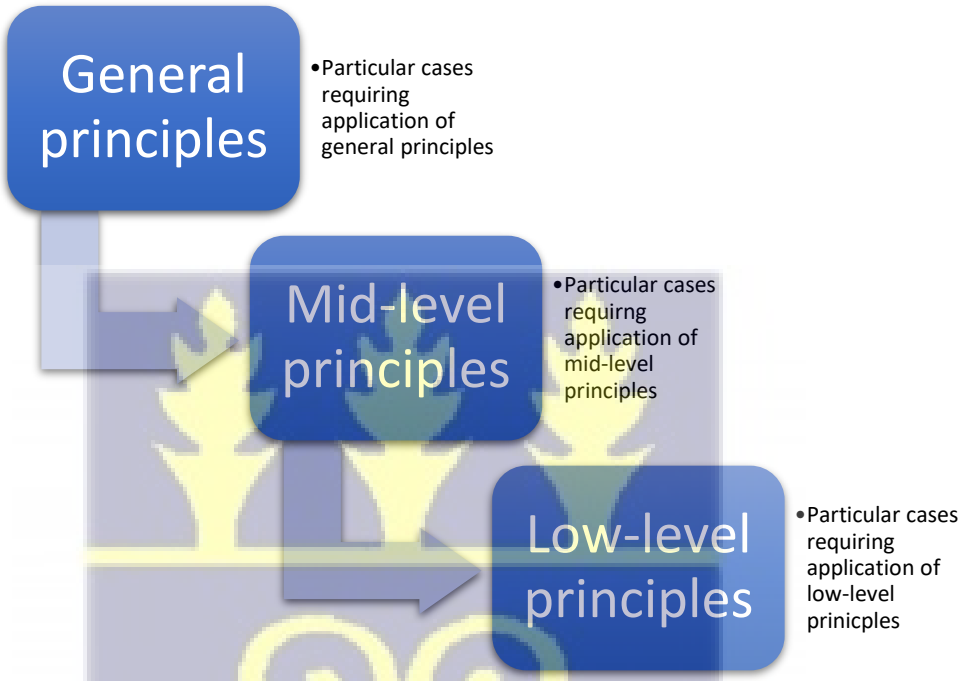


Figure 3: Sunstein's incompletely theorizing agreement (ITA) posit that that amidst disagreements, some agreements could be reached if the debates over abstractions are minimized, and the focus is placed on outcomes. General principles are the fundamental abstractions concepts that underly some public policies and law. Examples are utilitarianism, Kantianism, virtue ethics, ethical relativism, African moral philosophy, Rawlsian theory of justice, and others. Mid-level principles are derived from general principles. For example, pro-life scholars underlying principle against abortion from the general principle against murder. Opponents of death sentence may base this mid-line principle on the general principle of do not murder. Hence, the principle against murder may provide two other mid-line principles around abortion and death sentence. Low-level principles are further derived from mid-line principle, and they are usually associated with particular cases. There are three kinds of ITA. The first, incompletely specified agreement says that people may agree on a general principle but disagree when they are applied in specific cases. Secondly, incompletely specified and

generalized agreements explain that people may agree on mid-line principles but disagree on general principles and their application in specific cases. Lastly, incompletely theorized agreement on particular cases posits that people may agree on the outcome of a case but disagree on the low-level principle applied (Sunstein, 1994).

CHAPTER FOUR

4.0 RESULTS

4.1 Ethics of voluntary organ donation and organ market in Ghana

This section demonstrates whether there is a moral justification for the use of various organ donor recruitment strategies: voluntary organ donation and organ market. The arguments for and against voluntary organ donation and organ market are presented herein, including how two donor recruitment strategies are viewed from both Western and African moral thought. Voluntary organ donation would be presented first, and then the organ market would follow.

4.1.1 Voluntary organ donation

Preamble: *In this subsection, I outline the various arguments that have been raised for and against voluntary organ donation as an organ donor recruitment strategy. As a policy, it is characterized by moral dilemmas, and different scholars have sought to resolve them.*

The classical approach to recruiting organ donors, living or deceased, is via voluntary or altruistic organ donation (Thaler & Sunstein, 2021b). Living family, friends, or strangers who are healthy may freely offer to donate their organs, usually one of paired organs, to a kin, friend or stranger who is in need of an organ. Donation to a known recipient is specified direct donation, however, if an exchange programme is used, it is termed as specified indirect. Donating to an anonymous person on a waiting list is termed as unspecified donation (Lewis et al., 2021a). Also, some persons may voluntarily register to be categorized as deceased/cadaveric organ donors and offer all or some of their organs to be harvested for donation when they die, especially from a noninfectious cause, and usually following brain death (Wendler & Dickert, 2001). These do not come with any incentives (whether in cash or kind); hence it is categorized as voluntary or altruistic organ donation. A study conducted in

Ghana, amongst 480 participants, revealed that about 50% were willing to become living organ donors, and 70% found deceased organ donation to be unproblematic. In fact, all 17 kidney transplant that have been conducted in Ghana (see section 2.2) were from living organ donors (Osafo et al., 2018).

Voluntary/Altruistic organ donation is historically an ethically ideal approach to organ donor recruitment (Thaler & Sunstein, 2021b). It is in sync with classical prima facie principles of respect for autonomy, beneficence, nonmaleficence and justice (Beauchamp, 2003; Gillon, 1995; Shea, 2020). Respect for autonomy requires that no organ harvesting should be conducted on an individual, unless there is an explicit informed consent that was voluntarily given in a nonmanipulated or coercive environment, from the potential donor. Respect for autonomy is also in sync with Kantianism, which proposes that no person must be used as *a means* to an end, save the person has categorically granted an informed consent. Immanuel Kant agrees that it is practically impossible not to use people as a means to a desired end, because, for example, sellers use buyers as means to make profit. In the context of organ transplant, potential donors are not supposed to be used as means to achieving optimum health for persons with end-organ failure, unless there is consent (Birsch, 2014). Consent transforms an activity that would have ordinarily been unacceptable, to an acceptable one (Bazzano et al., 2021). In this case, it is an offence to harvest someone's organs, unless there is valid informed consent. Both *principlism* and Kantianism propose respect for autonomy before harvesting organs for transplant. Furthermore, the principles of beneficence and nonmaleficence require that irrespective of the goal of achieving optimum health for the person with end-organ failure, the organ donor ought to be treated in such a way that s/he would not be harmed (nonmaleficence) and the surgical procedure would be done in such a way to be beneficial to the person (beneficence). However, beneficence is difficult to attain in living organ donation–

altruism– because such a major surgery causes physical harm to the donor. The surgery must, therefore, be done in such a way to significantly minimize the harm caused to the donor. One way to ensure that possible harms are minimized is that living donors must be reviewed before and even after surgery to ensure that perioperative and post-operative complications are minimized (Ulasi et al., 2021). In situations where nonmaleficence cannot be adequately achieved, then the organ harvesting must not proceed. For example, when the potential organ donor has comorbidities that put him/her at higher risk of developing perioperative complications or long-term post-operative complication, then the surgery must not go on. The twin prima facie principles of maleficence and beneficence are also in sync with utilitarianism/consequentialism (Beauchamp, 1995; Birsch, 2014) and Kantian categorical imperative (Birsch, 2014; O'Neill, 2015). Utilitarianism proposes that the best moral decision must be one that offers the best average utility/good to majority of people. Consequentialism arm of the theory of utilitarianism argues that moral value of an act or omission is determined from the outcome of the act or omission. From a utilitarian and consequentialist perspective, organ donation is not necessarily inherently good, unless the outcome is averagely good to the greater number of people (Holm, 2007). Voluntary organ donation policy, guided by nonmaleficence, therefore, proffers better utility. Kant's categorical imperative posits that one must act on a maxim if and only if one would still choose the maxim if it were a universal law (Birsch, 2014; O'Neill, 2015). Therefore, a universal law that protects altruistic organ donors is a maxim that Immanuel Kant would assent to. Justice, the fourth prima facie principle argues that there should be a fair distribution of resources, in such a way that *equals* are treated equally, and *unequals* are treated unequally (Beauchamp, 2003; Gillon, 1995; Holm, 2007). Aristotle terms this as proportionate justice (Ruger, 2006). Organ donors must not be sacrificed for persons in need of viable organs. Organ donors must be treated like any other patient who is about to undergo an invasive therapeutic surgery, in such a way that explicit informed consent

and adequate pre-operative reviews would not be sacrificed. Furthermore, persons in need of viable organs must not also be sacrificed for emotional satisfaction that comes with altruism. For example, when a recipient and a donor are not compatible, the transplantation ought not proceed. Also, all laboratory investigations and standard operative procedures that need to be done must not be adhered to, to protect recipients. Persons in need viable organs must be treated as any other patient who needs treatment (Ulasi et al., 2021). Another arm of justice, which is beyond the scope of this thesis is fairness in choosing recipients of viable organs, as this work focuses on donor recruitment.

Using Anglo-American ethical principles, theories and frameworks, voluntary organ donation is an ethical approach to organ donor recruitment. These theories focus on the rights of the individual organ donor. The donor is primarily the central person: individualist ethos. However, the question is whether there is a space for voluntary organ donation in Ghana sociocultural ethos. Using African normative framework, – ontological communitarianism, empathetic humanism, and virtuous character, – voluntary/altruistic organ donation is acceptable in the African sociocultural milieu. This is because ontological communitarianism bestows a normative value in the act of helping another person, where it is practically possible. For example, donating two corneas after death to heal the blindness of a living recipient is sync with the Ubuntu philosophy and the African communitarian ethos. Secondly, empathic humanism posits that potential donors, patients with end-organ failure, and healthcare professionals are duty-bound to seek the best interest or every stakeholder. This creates a safe space for every stakeholder to appreciate that their rights, which arise from their object moral status are being respected; and their responsibility to the community which stem subject moral status are being appreciated. Lastly, virtuous character stipulates that healthcare professionals must ensure to develop ethical and professional character such that in situations where ethical

tensions arise in voluntary organ donation, they will be well positioned to resolve them. In the context of capability approach, voluntary organ donation as a policy in its *raw* state does not take into cognizance the various conversion factors (see section 3.2) that influence actualization of potentials. Individuals are expected to decide altruistically and voluntarily to register as organ donors. Personal, social, and environmental factors influence intention and behaviour gap. African normative framework, therefore, supports voluntary organ donation, however, establishment of organ donor system merely based on voluntary organ donation does not adequately answer the need at stake, wide donor-recipient gap.

4.1.2 Organ market

Preamble: *Organ market was proposed as a response to the failure of voluntary organ donation to response sufficiently to the widening viable organ demand and supply gap. This section outlines the ethical justifications for organ market as a recruitment strategy, and then the counter arguments it. Organ markets will be first described, and its ramifications outlines before the details of the debate are laid down.*

The challenge mentioned hereinbefore with the persistent widening gap irrespective of an ethical voluntary organ donor recruitment brings to the fore another approach, organ market system (Albertsen, 2020; Erin & Harris, 2003; Healey, 2008). Organ market system, commonly practiced in India and Bangladesh, though illegally, financial incentives are provided for the purchase of viable organs from organ sellers (Goyal et al., 2002; Moniruzzaman, 2018). This approach to organ recruitment has been necessitated as result of the failure of altruistic organ donation to meet the rising need for organs. There are five organ market systems. These are regulated organ market, which others describe as ethical organ market system, unregulated [open] organ market, payment-for-consent futures organ market, family-reward futures market,

and black organ market (Albertsen, 2020). The former four are grouped under an open organ market. Under regulated organ market the government intervenes in the open organ market in such a way to monitor and control prices and ensure fair distribution of organs. The government also attempts to ameliorate the abuses that characterize the organ market system.[8] Charles A. Erin and John Harris describe an ethical organ market where people within a particular jurisdiction are allowed to sell organ at a high and attractive price to a single and the only institutionalized buyer like the National Health Service (UK) or Ghana Health Service (Ghana) (Erin & Harris, 2003). The buyer would then use a fair and priority-based approach to distribute the organs to patients. In addition, residents would also be allowed to receive organs from within the jurisdiction. In fact, it was argued that since organ replacement therapies like renal dialysis are not expensive, a definitive treatment like a viable cannot also be sold at a cheap price (Erin & Harris, 2003). Another approach to an open organ market system is the unregulated approach where buyers and sellers bargain on their own terms with little or no government interference. This liberal market allows the invisible hand of the market to control prices and distribution of organs (Albertsen, 2020). This system is somewhat like a black-market system. However, the difference between unregulated organ market and black-market is that former is open, acceptable modus operandi, and legal in the society, whilst the latter is illegal, such that middlemen secretly recruit sellers for organ buyers (Albertsen, 2020; Goyal et al., 2002; Moniruzzaman, 2018). Payment-for-consent futures organ market allows a person to enter into a futures agreement with a buy to offer his/her (seller) organs for transplantation in future after the death of the seller. Based on the contract, a seller may receive payment or valuable considerations once the contract has been signed and has registered as a seller (Albertsen, 2020). The family-reward futures organ market, unlike payment-for-consent

[8] Abuses that characterize organ market will be discussed in detail later, however, it poor are usually on the receiving end of organ market-associated abuses.

futures market, the beneficiary of the sale if the family of the deceased who signed the signed the futures contract as registered seller when s/he was alive. In both cases, the harvesting of the organ(s) is in future of the death of the deceased registered seller. It must be noted that organs are not always exchanged for monetary terms. Sometimes they are exchanged for reduced health insurance premium (Albertsen, 2020). Other proposed models of organ market, which are similar to models described herein are: compensating family of the deceased donor, compensating registered deceased donor before death, and finally offering clinicians and hospitals incentives to convince/pressurize family member of a potential deceased donor to consent to organ harvesting of their deceased kin (Healey, 2008).

The primary argument of organ market is that it incentivizes the sale of organs, which increases the supply of organs for transplant. This is an attempt to rope in organ donor who ordinarily would not have donated their organs if they were free (Healey, 2008; Rees et al., 2017). On the other hand, some altruistic donors also refuse to donate because the monetary incentives negatively impact the voluntary and altruistic intention behind the donation (Goyal et al., 2002; Moniruzzaman, 2018). Several other challenges characterize organ markets(Goyal et al., 2002). Firstly, it is associated with abuse of the poor. The pricing of organs on the market usually entices the poor to sell their organs; however, the rich have a higher purchasing power over the poor on the market. This creates an unbalanced system where the poor remain vulnerable sellers, yet weak buyers on the market (Goyal et al., 2002; Moniruzzaman, 2018). Especially in the black organ market, organs are sometimes harvested in an unsafe manner. Sometimes, donors do not get access to post-operative care. The principles of nonmaleficence and beneficence are usually disregarded. Globally, organ market has been banned, bar Iran where it where there is an incentivized organ market system, and India and Bangladesh where there is thriving black organ market (Goyal et al., 2002; Lewis et al., 2021a; Thaler & Sunstein,

2021b). In India and Bangladesh, a study using snowball approach noticed that some sellers regretted selling their organs, and some would have decided otherwise if they were financially comfortable (Goyal et al., 2002; Moniruzzaman, 2018). Another challenge is that monetary incentives sometimes lead to harvesting of unhealthy organs. This has been shown in studies that revealed that voluntarily donated blood were safer than blood obtained from black blood market (Albertsen, 2020; Goyal et al., 2002; Moniruzzaman, 2018). Furthermore, it is argued that organ markets inherently invalidate consents forms. This is because they are characterized by socioeconomic coercion, inducement, enticement, and personal factors that diminishes the degree of voluntariness of the organ seller (Goyal et al., 2002; Moniruzzaman, 2018). Amongst the five models, unregulated organ market and black organ markets are highly characterized by the challenges that invalidates consent. Studies have also shown that the organ market harms sellers. In fact, some sellers complain that their living conditions did not improve following the sale of their organs. Some regret their decision, and others experience deterioration of their general health status. This system is also considered an exploitative approach to organ recruitment, and finally it turns humans into a commodity that can be sold in whole and in parts. The latter affects the very fabric of human dignity (Albertsen, 2020). As of 2018, Iran was the only country with a regulated organ market system. However, studies show that even regulated organ market is still characterized by exploitation of the poor, and harm to sellers (Moniruzzaman, 2018). Organ market as a public policy is inherently at variance with capability approach. The sale of organs creates barriers for persons who may need financial muscle as a conversion factor to be able to achieve the desire of receiving a viable organ. Ruger's framework of capability approach and incompletely theorizing approach seeks to protect the health of the vulnerable in our society (Ruger, 2006). Therefore, organ market impairs the conversion of capabilities (desire for viable organ) to functioning (health).

In general, autonomy of organ sellers is usually in doubt in organ markets (Moniruzzaman, 2018); though proponent of organ market argue that the autonomy to sell one's organs is central to the economic model of organ donation (Healey, 2008; Roth et al., 2004). It is argued that consent under this setting is questionable. Using fair transaction model of informed consent, and not autonomous authorization, the consent of a potential donor may become invalid if appropriate steps are not put in place to protect them from harm (F. G. Miller & Wertheimer, 2011). Exploitation of sellers, with short-term and long-term harm caused to them, relegates the prima facie principles of beneficence and nonmaleficence to the background. Justice is also in doubt because the distribution of organs is usually in favour of the rich and biased against the poor. Even in regulated organ market, the poor lack reasonable purchasing power (Goyal et al., 2002; Moniruzzaman, 2018). Proponents of organ market argue that people are rational beings and the choice to participate in any form of market is free choice. Furthermore, organ market narrows the organ demand and supply gap, though this position is not uncontroversial as explained earlier that some altruist donors may be lost if organ market is implemented (Albertsen, 2020; Healey, 2008; Roth et al., 2004).

Death and perimortem events are integral to African, *ipso facto*, Ghanaian sociocultural ecosystem. They influence one's social status–*ancestor-ship*–in society. Traditionally, the age of death, kind of death, and the nature funeral determines one's ancestral status (Banyubala, 2014a, 2014b, 2016). Living kinsmen are duty-bound and guided by communitarian ethos to ensure that deceased kins are treated with respect and magnanimity. It is sometimes believed mishandling of the dead and matters of interest to the dead can invoke the wrath of the gods, ancestors and the dead (Banyubala, 2014a). Also, amongst some ethnic groups like the Konkonba, it is believed the dead must journey to the land of the dead with no mutilation or missing body parts. However, this tradition is not cast in stone, as it is also a custom that

deceased pregnant women who experienced the quickening of the foetus are buried separately from the unborn child. This would mean that deceased pregnant woman is dissected to remove the foetus. This very act is capable of renegotiating the social status of the dead posthumously (Banyubala, 2014a). Some royals, especially amongst the Akans, believe that members of the royal family must not undergo any form of dissection after death. Interestingly, in situations where there are suspicions surrounding the death of a kin, and litigations over estate, Ghanaian customs appear to readily give in to the Coroner's Act 1960 (Act 18) of Ghana, which stipulates a coroner's or medicolegal autopsy be conducted to rule out unnatural cause of death like homicide and suicide (Akakpo, 2022). The oxymoronic co-existence between aversion towards, and adherence to posthumous dissection of the dead in Ghana, via customary and medicolegal route, presupposes cadaveric organ donation is not necessarily and immutably abhorred. Nonetheless, the family of the deceased have significant interest in what happens to their dead kin, because the body of the dead belons to the family (Banyubala, 2014a, 2016).

Organ market in Ghana, therefore, would operate within a sociocultural context where the family and the state have interest in the dead based on perimortem events. Suspicions of unnatural death piques the interest of the state through the coroner/magistrate, and sometimes the living family members (Akakpo, 2022). For the purpose of post-mortem personality identity renegotiation (PPIR), living kins may request some culturally acceptable procedures to renegotiate the social status of the deceased. This may sometimes require dissection of the deceased, postmortem (Banyubala, 2014a, 2016). However, a partial acceptance of purposive approach to dissection of a deceased kin, may not necessarily translate into acceptance of sale of parts of the human body. Hence, though African normative framework may support cadaveric organ donation for communitarian and empathetic humanistic purposes, the Ghanaian culture does not subscribe to the commodification of the human person and the sale

of human parts. It is seen as abominable. In fact, the Coroner's Act, 1960 (Act 18) and Anatomy Act, 1965 (Act 280) abhors dissection of the deceased by unauthorized person and also sale of human parts for any purpose (Akakpo, 2022).

4.2 Ethics of nudge theory and organ donation in Ghana

Preamble: *In this section, the moral dilemma surrounding organ donation will be unpacked, and the debates will be outlined. Furthermore, the intra-nudge element debates would also be outlined, as the moral dilemmas a not just between nudge theory and other recruitment strategies, but also the various nudge elements have various characteristic moral tensions.*

Libertarian paternalism in clinical practice has been seen a tool that disregards patient's autonomy (Gorin et al., 2017; Simkulet, 2018). This is because the principle underlying nudge theory exploits automatic cognitive system, to influence people to make decisions (MacKay & Robinson, 2016). Hence, this approach does not confront the rational cognitive system, thus, circumventing the autonomy of people. It is, therefore, opined that informed consent that is obtained under the influence of nudge elements is invalid (Brooks, 2013; Simkulet, 2018). For example, different surgical techniques are used to repair hernia in Ghana: Bassini, MacVay, Nylon darn and prosthetic mesh repair. The latter one is more expensive than the former three (Yenli et al., 2017). Prosthetic mesh repair requires the use of prosthetic mesh, which is paid out of pocket.[9] Appropriate informed consent procedure requires that surgeons explain all available hernia repair techniques to the patients, including levels of effectiveness and cost implications. However, some surgeons employ smart disclosure, and default rule or status quo bias during inform consent process. They inform patients about prosthetic mesh repair only.

[9] The author is a Ghanaian clinician who has witnessed purchase of prosthetic mesh by patients in his line of duty.

Unless a patient asked about other alternatives, prosthetic mesh repair remains. This approach of nudging patients towards prosthetic mesh repair (though an effective hernia repair technique), increases patient uptake of this repair technique; however, through a questionable consent process. This is because, patient's deliberate decision-making has been circumvented, and most importantly, smart disclosure was used to keep some alternative techniques away from the patient. Another example of questionable application of nudge theory is the modus operandi that is usually employed in Ghanaian pharmacies. When patients or their relatives visit a pharmacy to purchase a prescription drug, the staff at the counter brings out only the most expensive brands: smart disclosure, opt-out and default rule. Unless clients ask of other brands and their respective prices, they would end up purchasing the most expensive brands. Smart disclosure is used in pharmacies to nudge patients to buy expensive drugs. Ideally, clients should be informed about various brands and their prices, including any risks and benefits each comes with. Nudging in these examples are considered to defy patients' autonomy and invalidates informed consent. Though prosthetic mesh repair may ideally and theoretically be in the best interest of patients because of its relative effectiveness, the consent process was marred by libertarian paternalism. Thaler and Sunstein are not oblivious of the potential of nudge theory being abuse, and that is why they advocate for nudging for good (Thaler & Sunstein, 2021a).

In fact, these incidents in some Ghanaian surgery departments and pharmacies bring to the fore the other criticism against nudge theory in clinical practice: coercion and manipulation. Libertarian paternalism has been accused of being coercive and manipulative. Some critics intimate that popularizing nudge theory in clinical practice would lead to a slippery slope of manipulation and abuse of patients for the service providers, other than patients (Gorin et al., 2017; Thaler & Sunstein, 2021a). For example, in the case of hernia repair in Ghana, the

surgeon profits from the sale of prosthetic mesh, at the expense of vulnerable patients. Furthermore, it is argued that the existence of system 2 and its inclusion in decision-making questions the frequency of heuristics and bias. Thus, behavioural biases and errors are not as frequent as Thaler and Sunstein present them to be. Also, empirical evidence of nudge theory does not always generate the same results in different cultures and contexts. These arguments seeks to question the foundational principles of nudge theory, hence, its effectiveness (de Quintana Medina, 2020). Lastly, it is also argued that nudge tools do not work in isolation, and it has been noticed that in the absence of appropriate infrastructures, nudge tools do not fetch the appropriate results (Gorin et al., 2017; Thaler & Sunstein, 2021a). For example, libertarian paternalism was employed to enhance COVID-19 uptake via vaccine mandates. However, countries that did not have enough vaccines to match up against the increasing demand of the vaccine experienced lower vaccine uptake (Mills & Ruettenauer, 2021). Also, Spain is one of the success stories of nudge theory and organ donation in Europe: soft opt-out. However, it is argued that the existence of established and effective organ transplant systems contributed significantly increase in organ donation (Rithalia et al., 2009; Thaler & Sunstein, 2021b). Brazil is considered as one of the countries that implemented a nudge-based approach to recruit organ donors yet failed to meet the target (Rithalia et al., 2009). Opponents of nudge theory also argue that libertarian paternalism thrives when people are oblivious of being judged (Gorin et al., 2017; Thaler & Sunstein, 2021a).

Proponents of nudge theory in clinical practice and public health, however, argue that there is no nudge neutral context (Brooks, 2013; Gorin et al., 2017; Thaler & Sunstein, 2021a). Once options are laid before patients, there is already an inherent nudge within the choice architecture (see section 2.7). In fact, by failing to nudge as a choice architect, one has already made a choice to nudge or allow other inadvertent nudges to operate. For example, in the school

cafeteria experiment, the order of arrangement of food formed the choice architecture. Whichever food is placed at eye level or closer to the door had a higher chance of being selected. The manager of the cafeteria experiment mentioned in section 2, therefore had the option of placing healthy foods at these positions or not. Based on the absence of nudge neutral choice architecture, proponents argue that the question ought not be whether to nudge or not to nudge. Rather the question should be about how to nudge for good. For example, in 1974, the World Health Organization launched the Expanded Programme on Immunization (EPI) (Shen et al., 2014), which was later launched in Ghana in 1978 (Agadzi, 1978; Government of Ghana, 2009, 2014). The objective of the programme was to use routine immunization strategy and scheduled child health visits to immunize every child against vaccine preventable diseases (Shen et al., 2014; World Health Organization, 2016; World Health Organization for Africa, 2017). In Ghana, it is a default rule, guided by presumed consent that every newborn is vaccinated at birth, and then subsequent vaccinations are administered during scheduled post-natal visit, static immunization strategy. This has also been complemented with outreach vaccination strategy. Pregnant women are being nudged for good based on the standard understanding of the role of immunization in reducing under-5 mortality in Ghana and globally. Also, pluralistic ignorance amongst pregnant women reduces the chances of women opting out of EPI, because women believe that everybody else has no problem with EPI. Proponents of libertarian paternalism argue that where the average best interest of the populace in known or there is public health policy of interest, then nudging for good is the best approach (Soled, 2021; Thaler & Sunstein, 2021a). Nudging for good is further supported with the evidence-based argument that in cases where individuals have a strong position against the direction of a nudge, usually, the nudge fails. Furthermore, contrary to the position of opponents who argue that libertarian paternalism thrives most when people are oblivious of the fact that they are being nudged; studies show that transparency does not affect the effectiveness of nudge, and

in fact, Thaler and Sunstein propose transparency for when employing nudge theory. In fact, a poorly implemented nudge could lead to reactance, such that people would refuse to choose the direction of the nudge (Thaler & Sunstein, 2021a).

Respect for autonomy is integral to bioethics irrespective of the sociocultural context from which the guiding principles, theories and principles are drawn. *Principlism* and Kantianism, which are typical Western moral theories, stipulate respect for the rights of individuals to decide and choose what is in their own best interest. African moral ethos is mainly communitarian (responsibility to the community), yet it reasonably balances communitarianism against individualism (rights of the individual) (Abraham, 2015; Gyekye, 2004). This is evident in the dual conceptualization of moral status (Atuire, 2022). For example, in African traditional medicine, traditional healers expect at least one family member to join the patient at the shrine such that every treatment is discussed and consented to before they are executed (Twumasi, 1975a). Respect for autonomy, even in cases of unconscious patients, unrepresented patients, incapacitated patients, and minors, respect for autonomy is still upheld in the requirement of power attorney, wills, patients advocate, next of kins, and even the courts or hospital ethics committees to ensure that autonomy of patients are not disregarded (Cole et al., 2022; Courtwright & Rubin, 2016; Ozar, 2019; Pope, 2019; Tobey & Simon, 2019). Hence, the argument that nudge theory defies patient's autonomy is very important as is speaks to the foundation ethics. Proponents of the use of nudge theory in clinical practice, however, disagree that nudge theory defies respect for autonomy (Thaler & Sunstein, 2021a). They argue that therein nudge theory (libertarian paternalism) is the protection of freedom of choice: libertarianism. That is why nuisance tax, for instance, does not fall under nudge tool. This does not allow the freedom to refuse to pay. Libertarian paternalism give room for people to freely choose. Freedom of choice is the foundation of respect for autonomy. Furthermore,

paternalistic arm of nudge theory is not the same as coercion and manipulation (Gorin et al., 2017; Sharif & Moorlock, 2018). Nudge theory acknowledges that human rationality is *bounded*, and humans are likely to be influenced to err or make decisions contrary to their authentic choices. Furthermore, some situations are complex, overwhelming with information, and infrequent that without assistance, people are likely to make decisions that are contrary to their authentic choices. Also, choice architectures are always inadvertently influencing people towards some directions of a sort, so there is a need to assist people (*Homo sapiens)* to be able to make their decisions that would be to their best interest. For example, using smart disclosure (enlarging ingredients like peanut, egg, and milk that can cause allergic response) to help consumers easily notice allergy-associated ingredients is subtle way assisting selection of processed foods. If all ingredients are written in the same small size, consumers are likely to miss important allergy-associated ingredients due to human bounded rationality. Subtle reminders to attach documents when sending emails via Gmail, is a form of nudging. Reminding drivers to choose whether to become organ donors or not, using voluntary active choice or mandated active choice, is nudging but they are they implemented because human are likely to forget to act on their intentions (Thaler & Sunstein, 2021a). Furthermore, Michael B. Gill (2004), a proponent of presumed consent, a nudge element, approaches the debate of autonomy from another perspective, with the fewer mistake claim. He argues that there are two models of autonomy: non-interference model and respect-for-wishes model. According to no-interference model of autonomy, it is wrong to interfere with another person's body unless the latter has granted consent to do so (Gill, 2004). According to the respect-for-wishes model, a person's body ought to be treated in line with how the person wishes that the body be treated (Gill, 2004). Thus, the non-interference model abhors interference without consent, and the respect-for-wishes model allows interference that would ordinarily be one's wish i.e., it abhors interference that would be against one's wishes. Gill further argues that persons with whom

are dead, unconscious, or persons without capacity to grant consent have respect-for-wishes model of autonomy but not non-interference model (Gill, 2004). For example, when a dead person is found on the street, the body would be carried from the street to the morgue though there is no explicit consent saying that 'I consent that you carry me from the street to the morgue, in case you find me dead on the street.' It is common knowledge that most people would wish that their dead bodies were not left to rot on the street (Gill, 2004). On the other hand, if a conscious person with capacity is seen standing on the pedestrian lane by the roadside, without consent, his body cannot be interfered with (Gill, 2004). Hence, in the context of presumed consent in organ donor recruitment, the argument that harvesting organs without explicit informed consent of the deceased is untenable, because a dead person does not possess non-interference model of autonomy (Gill, 2004). The question, therefore, is how to identify the wishes of a deceased potential donor according to respect-for-wishes model of autonomy. This part would be discussed I the subsequent section, where fewer mistake claim is proposed by Gill (Gill, 2004), and no mere consent claim is proposed by Alexander Zambrano (Zambrano, 2018).

Interestingly, though opponents of nudge theory argue that nudge theory tool need conventional policy interventions to be effective, proponents do not significantly disagree with them. Proponents argue that nudge tools complement public policies and enhance outcomes. This is because it has been found that policies can be affected by existing choice architecture, since there is no nudge neutral environment. For example, a theoretically valid informed consent for cornea donation, which uses the term eye donation instead of ocular donation leads to a few consents and donations (Bramstedt, 2022; Thaler & Sunstein, 2021b). Appreciation of bounded rationality and nudge theory would recommend that eye donation is replaced with ocular donation to minimize the repulsion that characterizes the term eye donation. Also, using soft

presumed consent approach where clinical intention to harvest organs is explained to the family of every potential deceased donor, complements informed consent. In fact, nudge can be employed as a complementary tool in voluntary organ donation and organ market system. I term this approach whereby nudge is used as a complementary tool as: $Nudge + x$. Where x is any public policy or clinical protocol that is employed in a clinical setting.

Generally, nudge theory is most effective when a person does not have authentic choice; when people's rational and *non-rational* choices would otherwise make them make choices against their authentic choice because they are not well equipped in the area in question; and finally when a person's best interest is non-negotiable, especially in clinical settings (Gorin et al., 2017; Sunstein & Thaler, 2003; Thaler & Sunstein, 2021a). From a *principlist* perspective, using nudge theory tools in organ donation is arguably in sync with respect for autonomy, and unarguably in sync with beneficence, and nonmaleficence. It focuses on the best interests of others. In my opinion, a true respect for autonomy in informed consent process is one that takes full cognizance of both system 1 and system 2 of human cognitive system. This is because a disregard of any of them is a disregard of the full person. Humans are influenced by both logical argument and subtle extra-rational cues like mere font size, text colour, choice of terminology and addition of reminders. Hence, clinicians ought to make sure that choice architecture is well designed to protect people from making decisions that generally go against best practice.

Considering Ghanaian society, nudge theory is in sync with African normative framework. This is because the clinician is placed in a position to design a choice architecture that is in the best interest of the patient and organ donors: ontological communitarianism and empathetic humanism. Furthermore, the third arm of the African normative framework, virtuous character, requires that clinicians and policymakers use nudge for good. This arm helps deal with some

of the fears of the opponents of nudge theory, the slippery slope predicament. To further support African normative framework on how to nudge for good in organ recruitment, capability approach requires that people are provided with the appropriate nudges (resources) that help them to make choices freely to promote their individual function and flourishing. For example, it would not be advisable to use same informed consent procedure without any complementary nudging for a surgeon who wants to register as a deceased organ donor, and a 50-year-old man with only primary school certificate who also has the intention to register as a donor. This is because the level of complexity of the information varies between the two persons, and the frequency of meeting situation requiring organ transplant are different for the two persons. Capability approach would, therefore, require that the consent process for the latter is designed such that subtle nudges like framing are added to assist in making decisions. This would not be a problem because if the latter ideologically abhorred cadaveric organ donation, nudge tool would not make much difference. Lastly, in choosing appropriate nudge tools in the Ghanaian context, policymaker need to employ incompletely theorizing agreements, which argues that the focus need not be on the disagreements over details, but the broader picture of designing an organ transplant system that works and has the capacity to bridge organ demand-and-supply gap, and at the same time it is devoid of systemic abuse of vulnerable people. Choosing $nudge + x$ approach is therefore the way to go. In addition, guided by African normative framework, the choice of nudge tools must be guided by nudging for good in the Ghanaian sociocultural context. Ghanaian context supports individual rights, and individual responsibility. It also supports free choice and giving a helping hand to the vulnerable and needy (ontological communitarianism and empathetic humanism).

4.3 Recommended strategies for organ donor recruitment in Ghana

Preamble: *Outlined in this section are the various organ donor recruitments strategies that are in sync with African moral thoughts and hold the potential to be an acceptable and permissible recruitment strategy for Ghana and including the reasons behind their permissibility.*

Libertarian paternalism is supported by African normative framework, as both argue that the individual ought to freely make decisions, however, communitarian ethos and empathetic humanism require that people are assisted/supported in such a way that is in their best interest. Furthermore, capability approach requires that in designing organ donation protocol, the diversity in human desires must be brought to light, such that people are protected from choice architecture that inadvertently influence them away from their various authentic choices that are originally aimed at their individual flourishing. Furthermore, virtuous character and incompletely theorizing agreement, with capability approach require that clinicians and public policy-makers nudge for good. It is against this background that Nudge theory-based approach to organ donor recruitment is recommended for Ghanaian socio-cultural context.

Soft presumed consent is considered by Thaler and Sunstein, and several European countries to be the most appropriate approach to nudging in organ donation; and as result, it has been enacted accordingly. This is because, in addition to exploiting status quo bias, it respects the decisions of the deceased evidenced in previously signed instructions to be excluded from organ donation. It also respects decisions and interests of next of kins that says that their deceased kin be excluded from organ donation (Thaler & Sunstein, 2021b). In fact, attempts at obtaining consent from the family of the deceased is distressing to the family. It is argued that

a family that is mourning does not need to burden with the choice of consenting to harvesting the organ of the deceased kin. Pradeep Kumar Prabhu posits that,

> *"[It] puts an additional strain on the relatives in a situation that is already excruciating. The relatives are being asked to rule against the 'presumption' that the donor would not have wished to donate (which is the presumption in explicit consent jurisdiction), and consent to what they might consider as the mutilation of the deceased's mortal remains"*(Prabhu, 2019).

Also, as argued hereinbefore, persons who have deeply held believes such that they would not wish to be donors would not decide in in the direction of the nudge element, and would opt-out (Gill, 2004; Prabhu, 2019). This argument brings to the fore a contrasting argument that why should the presumption be in favour of consent (opt-out policy) and not disapproval of donation (opt-in policy). This is because presumed consent could lead to the harvesting of organs of persons who did not wish to be donors. Gill, however, argues that presumption could go either way: presumption that a lot of people prefer to be donors, and the presumption that a lot of people do not want to be donors. Also, whichever direction presumption goes, there would be persons whose wishes would not manifest: pro-donors would not get to become donors, and anti-donors whose organs would be harvested (Gill, 2004). Prabhu intimates that society cannot help it but choose which direction to commit a moral mistake: save lives of the living or protect the dead. He said,

> "Society will have to decide whether a moral mistake that saves other lives (mistaken removals in presumed consent policy) is in any way preferable to an equivalent moral mistake that in addition costs lives (mis-taken non-removals in a policy of explicit consent).It would be hoped that in a future where organ donation is 'the norm', history will not harshly judge us as a society that left its sick to suffer through a desire not to harm the potential autonomous will of its dead" (Prabhu, 2019).

Gill proposes that to know which when majority of people in a particular society prefers to donate, as in the example of US (about 70%) and UK (about 90%), then the presumption of consent could be upheld. Furthermore, this statistic could be extrapolated to fewer mistakes claim, where the probability of erring in mistakenly harvesting organs is less than the probability of mistakenly losing the organs of a one who wished to donate. In the Ghanaian context, a number of studies (see section 2.3) revealed that majority of research participants wanted to be deceased organ donors. Using Gill's fewer mistakes claim, presumption of consent could be implemented in Ghana. However, it would be in order, to conduct a nationwide poll to appreciate the percentage of Ghanaians or residents in Ghana who would prefer to be donors. Also, though Zambrano (2018) did not argue explicitly for presumed consent, but for a No Mere Consent claim for organ donor recruitment, his argument about autonomy can be contextualized herein. He argued that consent is neither necessary nor sufficient for organ removal. This is because some persons may grant explicit consent, but afterward may change their minds about it. Unfortunately, these persons may not be able to change their position on paper before they die. Hence, though an explicit consent may be present, if relatives are able to prove that before the death of the deceased donor, he wished to decline donation, then respect for autonomy would be a respect for wishes and not the consent. On the other hand, a person who may not have registered as a donor (or who have registered as a non-donor), but later changed his mind and did not get the opportunity to express it on paper; respect for autonomy would be the respect of the wishes and not the explicit disapproval on paper. Zambrano's argument posits that in organ removal, wishes are as important as consent, and each case must be considered such that the most recent wish/consent is accepted (Zambrano, 2018).

Presumed consent employs default rule, and it has been shown to be effective in organ donor recruitment, especially when it complements a well-established organ transplantation system – trained human resources with specialized laws and infrastructure. In a systematic review it was found out that in some jurisdictions, organ donation increased by 25-30%, 21-26%, 2.7 more donors per million population, and 6.14 more donors per million of population (Rithalia et al., 2009). Another systematic review revealed that in addition to the findings of Rithalia and colleagues, other studies found that there increase in donation rate by 13-19% (Palmer & Jones, 2012). Furthermore, presumed consent can coexist with voluntary organ donation systems. The latter may be complemented by nudge tools like reminders (prompted choice), voluntary active choice, and mandated active choice. Incentives (Capron et al., 2020; Thaler & Sunstein, 2021a) like free mortuary services for registered cadaveric donors may also be designed to complement voluntary organ donation.

Soft presumed consent is already applied in different aspects of healthcare policies in Ghana, like the Expanded Programme on Immunization. In fact, Ghanaian Intestate Succession Law, 1985 PNDCL 111 is an example of presumed consent in legal space. This law was enacted because some persons died intestate, and there was a need to share the persons estate in such a way that livings kins do not suffer. The presumption behind the law was that parents would wish that their living spouses and children benefits from their estate (Ofori-Amankwah, 2004). PNDC Law 111 is an example of Ghana employing presumed consent to share a deceased's estate to living beneficiaries. Also, prompted choice, voluntary active choice, and mandated active choice are included in antenatal care, where pregnant women are always required to undergo routine laboratory investigations and scheduled obstetric ultrasonography. These are policies that help monitor the progress of pregnancy. Pregnant women may choose to opt-out of the default arrangement, however, the well-structured choice architecture that combines

varying nudges, including social influence (identify-based cognition and pluralistic ignorance) makes it more likely for women to accept the routine laboratory investigations and scheduled obstetric ultrasonography. I believe that a hybrid of soft presumed consent and nudge-complemented voluntary organ donation will be the most appropriate tool for organ donor recruitment. In fact, in Ghana, blood donors are recruited using nudge-complemented voluntary organ donation methods. This is evidenced through reminders (example, outreach programmes) and social influence to influence and improve blood donation. This approach may be replicated in organ donor recruitment. Lastly, Nudge theory has been shown to improve adult health behaviour and diabetes management outcome. This is an important finding as end-organ damage from communicable diseases contribute to rising need for organ replacement therapy. In a systematic review, it was shown that nudge elements like framing, reminders, gamification (feedbacks), social modelling and social influence contributed to changing health behaviour of persons with diabetes (Kwan et al., 2020b). Hence, in addition to using nudge elements to recruit organ donors, these elements can also be implemented to improve the outcome of public health interventions taking underlying diseases that results in end-organ failure.

CHAPTER FIVE

5.0 DISCUSSION

This section outlines what the findings of this thesis (see chapter four) means to the Ghanaian organ transplant-related setting. In summary, according to the findings, voluntary organ donation and Nudge theory-based organ donation are ethically justifiable organ donor recruitment strategies in Ghana, and they are both supported by African moral thought. Soft presumed consent is a more preferred nudge in donor recruitment. Voluntary organ donation can be complemented by other nudge elements to enhance the outcome. Organ market is not an ethically justifiable organ donor recruitment strategy, and it also not supported by African moral thought, especially considering how it commodifies personhood.

Libertarian paternalism has made an inroad in public policy implementation across Europe and America. The United Kingdom has established a state institution called Behavioural Insight Team (BIT), whose responsibility is to explore how best deeper understanding of human behaviour and bounded rationality can be exploited to improve policy implementation (Delaney, 2018; The Behavioural Insight Team, 2022). BIT has been nicknamed the Nudge squad, as it exploits nudge theory to enhance policy decisions (Kosters & Van der Heijden, 2015; Thaler & Sunstein, 2021a). The United States of America has also infused nudge theory into a state institution, Office of Information and Regulatory Affair, where they exploit libertarian paternalism to improve policy decisions (Kosters & Van der Heijden, 2015; Thaler & Sunstein, 2021a). The European Union is also undertaking behavioural studies to further improve policy implementation (Kosters & Van der Heijden, 2015; Thaler & Sunstein, 2021a). Public policies represent the aims and aspirations of a particular society. Usually, the fate of policy depends on how society accepts it, and ultimately, how human behaviour changes to sync with the policy direction. An understanding of human behaviour and how they are

influenced by subtle and palpable elements within our environment – choice architecture – is very important. Bounded rationality, heuristics and bias, and nudge theory provide us important tools to achieve the outcome that society seeks with policies.

Strategies for organ donor recruitment is an example of a public policy. The absence of organ transplant system, the rarity of organ transplantation, and the continual loss of viable organs from potential organ donors are inimical to the modern and improved healthcare in Ghana. The discourse surrounding the establishment of organ transplant system must include organ donor recruitment strategy. The central problem has been how to narrow the organ demand and supply gap, using an ethical and culturally sensitive approach (Banyubala, 2014b). Voluntary organ donation is the minimum any organ transplant system can implement. It is safe and ethical. However, its output has been found to be insufficient to meet the demand. Organ market is at variance with Ghanaian sociocultural ethos. Therefore, considering that Ghana is relatively an organ transplant-naïve jurisdiction, and there is not organ transplant system in place, voluntary organ donation could be included in the toolbox of recruitment strategies. This would also require that other contributory factors that increase organ donation like higher educational level, gross domestic product per capita, and health expenditure per capita must be considered (Rithalia et al., 2009; Willis & Quigley, 2014). Organ donor recruitment strategies do not work in isolation, they require skilled healthcare professionals, and fit-for-purpose healthcare infrastructure. Nudge theory-based organ donor recruitment strategies have been demonstrated to agree with African ethos, using African normative framework, capability approach, and incompletely theorizing agreements. It has also been demonstrated that there are islands of nudge-like elements already existing in Ghanaian healthcare sector. There is a need to acknowledge their presence for what they are, and then whisk out instances where patients are being nudged in unethical and exploitative ways. Furthermore, there is need to begin to identify

various nudge elements that can be used to improve public health in Ghana, especially because the country has become an epidemiological melting pot: we are faced with communicable, non-communicable, and re-emerging infectious diseases. We must begin to consider establishing a Ghanaian Behavioural Insight Team (also known as the Nudge Unit), which will conduct studies into how best public policies would be designed and implemented taking cognizance of *Homo sapiens,* and not *Homo economicus,* who live in the Ghanaian society. This is important because considering the conceptual framework of this thesis (see figure 1, section 1.3) multiple nudge element influence not only organ donor recruitment but also other public health policies that influence not only organ transplantation but other health issues. Also, the success of every public policy depends on the public's uptake of these policies. Culturally sensitive empirical studies into behavioural economics and nudge theory in Ghana would help design policies in such a way that desired outcome would be achieved. A behavioural insight team would be a research team whose responsibility is to find the most effective and ethical ways to design choice architecture that would improve public policies. In the UK, the Behavioural Insight Team (BIT) was guided by a set of objectives, guiding principles and strategies from the outset. The objectives were to "transform at least two major areas of policy; spread an understanding of behavioural approaches across Whitehall; and achieve at least a tenfold return on cost" (Sanders et al., 2018). The BITs two guiding principles are to first nudge for good as advocated by Thaler and Sunstein, and to evaluate the impact made my nudges in public policies (Sanders et al., 2018). Some of the strategies were to nudge based on best evidence from behavioural science, and focus of interventions that saved monies or generated revenue (Sanders et al., 2018). Furthermore, though the BIT started as a government agency in 2010, it was made an independent institution in 2014 (Sanders et al., 2018; The Behavioural Insight Team, 2022). Since the inception of BIT, over 400 randomized control trials have been done on public policies infused with nudges. In fact, different state institutions have established

their own nudge units to enhance their policies (Sanders et al., 2018; The Behavioural Insight Team, 2022). Establishing a Ghanaian version of BIT would also require a multidisciplinary approach, consisting of experts from ethics, behavioural economics, behavioural psychology, project management, public health, and several other disciplines. Also, may adopt the objectives, guiding principles and strategies of UK's behavioural insight team as a template.

Soft presumed consent is the most favoured of the nudge-based organ donor recruitment strategies. However, other nudge elements can be used to complement voluntary organ donation. These nudge elements include framing, reminders, incentives, mandated active choices, voluntary active choice, social influence, removal of sludge, and several others (see figure 1, section 1.3). Nudge elements also require adequate and appropriate infrastructure and contributory factors to ensure their success. Spain, one of the earliest countries to implement presumed consent in organ donation, attributes its success story to also robust organ transplant-specific infrastructures, including human resources that were put in place to obtain the best out of nudge theory. Organ market does not sit well with African moral thought, however, incentivized donation, a nudge-based approach can be implemented in Ghana. Persons who register to become deceased organ donors, or family members who consent to cadaveric organ harvesting of their deceased kin can be provided with free mortuary services. Some health facilities in Ghana provide deceased healthcare professionals with free mortuary services, so extending this incentive to facilitate organ donation would not be necessarily novel, but rather transfer of experience from one context to the other.

The current unsatisfactory state of Ghana's organ transplant ecosystem is a labyrinth of factors including prevalence of communicable and noncommunicable diseases, absence of operation organ transplant system, no established recruitment process, inadequate donors, and several

others. As demonstrated so far in this thesis, the solution lies in adopting a multifaceted approach that has the capacity to tackle every aspect of the problem: from the underlying diseases to through health seeking behaviours to policies that target recruitment of donors. Nudge theory has the capacity to tackle the problem at various levels: directly increasing donation, and directly improving health seeking behavour and public health. Limitations of nudge theory, amongst others outlines hereinbefore, include the tendency to be abused. Atuire's African normative framework speaks to the needs to encourage continuous professional development amongst healthcare worker to enhance their sensitivity to ethical dilemmas: virtuous character. This would ensure that nudge elements are used for morally sound objectives. Without virtuous character inspired by empathetic humanism, ontological communitarianism, capability approach and incompletely theorizing agreement, Nudge theory will fall into the quagmire of unethical adventurism.

CHAPTER SIX

6.0 CONCLUSION

Voluntary organ donation and nudge theory, but not organ markets, sit well with African normative framework, with capability approach and incompletely theorized agreements. Thus, they are justifiable in Ghanaian sociocultural and public health context. Capability approach and incompletely theorizing agreements with virtuous character component of African normative framework are integral to monitoring the use of nudge theory in such a way that it is used for good. The appropriate nudge theory-based approach to organ donation is soft presumed consent. Voluntary organ donation can be complemented with creative use of nudge elements. Soft presumed consent can therefore be combined with *nudge-complemented* voluntary organ donation. It is appropriate to use nudge tools in conjunction with appropriate and established organ transplantation systems. Amongst other things, policy makers must always remember to *"nudge for good."*

6.1 RECOMMENDATIONS

There is a need for Ghanaian healthcare system, led by the Ministry of Health, to implement organ transplant system: specialized human resource, infrastructure, and organ donor recruitment strategy. These three synergistically work together to ensure equitable access to organ transplantation. There is a need to establish Behavioural Insight Team in Ghana, which would directly operate improve the outcome of organ donation programmes and, in fact, all other public policies through evidence-based approach. This institution could operate as an advisory body to all other state institutions as their mandate goes beyond only health policies. This new institution should be an autonomous quasi-government institution with a dedicated legislative bedrock and budgetary allocation. Also, in addition to the voluntary organ donation approach, nudge-theory-based approach to organ donor recruitment needs to be inculcated into

an organ transplant system to improve organ donor recruitment. A large population study into whether majority of Ghanaians prefer to be organ donors or not needs to be conducted, to serve as a robust empirical backing for a soft presumed consent strategy for organ donor recruitment. Also, using mandated choice policy, Ghanaians could be required to decide on whether to become organ donors or not, whenever they are applying for driver's license, and Economic Community of West African States (ECOWAS) identification cards, so that these pieces of personal information would be stored and a resorted to whenever one was brain dead and organ harvesting became an option. Lastly, the Ministry of Health should initiate a human resource policy that is targeted at training various cadre of healthcare professionals to become specialized in organ transplantation. In addition, the infrastructure to complement the human resource and most importantly, nudge theory-based and voluntary organ donation.

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