DEMAND ANALYSIS OF COFFEE CONSUMPTION IN UGANDA

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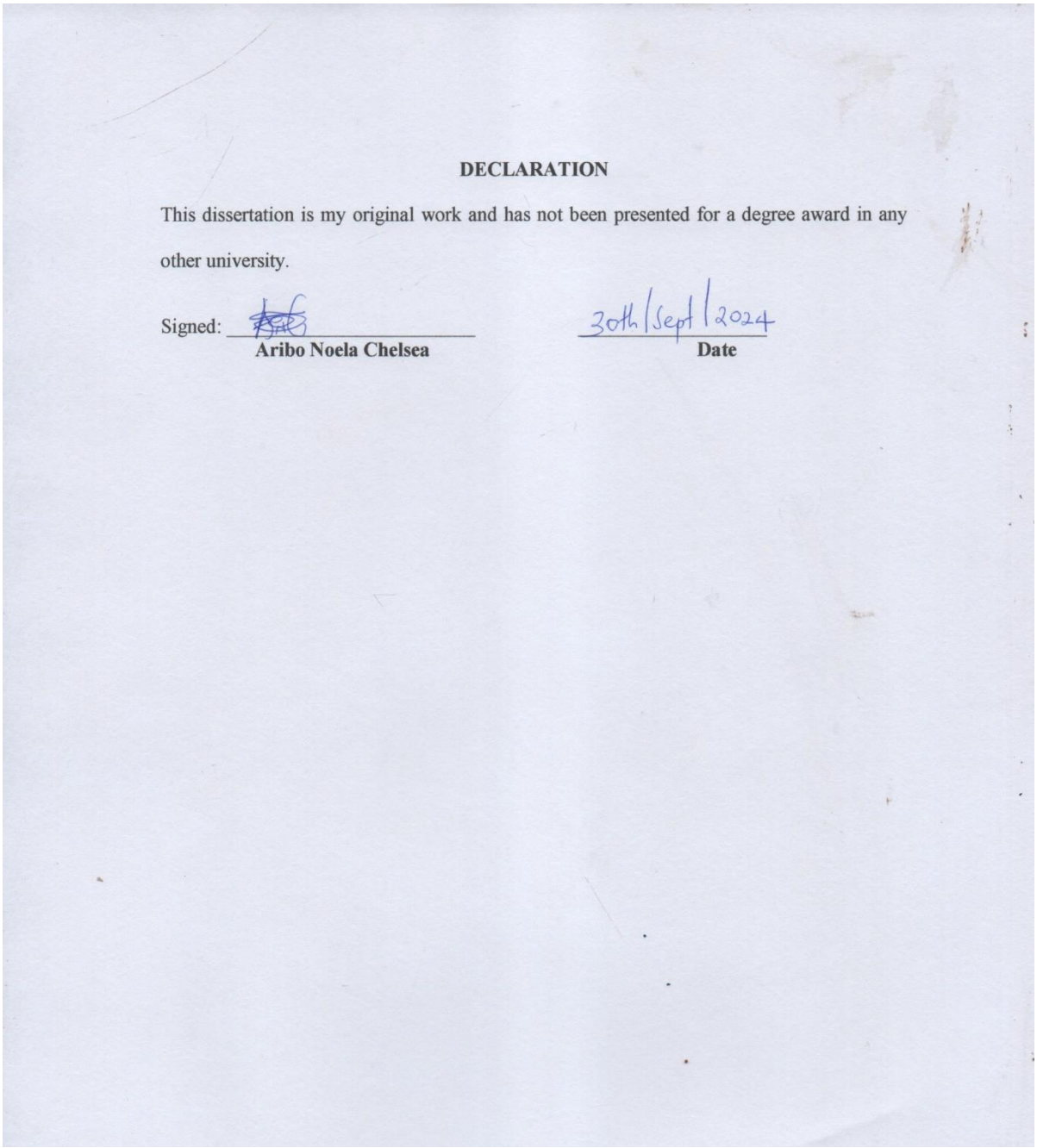
DECLARATION



DECLARATION

This dissertation is my original work and has not been presented for a degree award in any other university.

Signed: _____ 30th/Sept/2024

Aribo Noela Chelsea **Date**

APPROVAL

This dissertation titled "Demand Analysis of Coffee Consumption in Uganda" has been submitted by Aribo Noela Chelsea for examination with my approval as the University Supervisor.

Signed: Mirembe

Ms. Elsie Nsiyona
Supervisor

Date : 27/09/2024

DEDICATION

To my loving family, whose love, support, and patience saw me through this journey, and most importantly, to my father, Mr. Achota Samuel.

Let this study satisfy the interest of the coffee aficionados, sellers, and coffee lovers. This is for the hope that it will foster increased local demand for coffee in Uganda by the Uganda Coffee Development Authority.

To the emerging entrepreneurs, to those dreaming of having their very own coffee shop. And to the Uganda Christian Coffee Club, other universities' coffee clubs, and to coffee communities everywhere, I pray this study makes a meaningful difference for you and your clients. This study hopes to brew positive change that catalyses growth in Uganda's coffee industry.

ACKNOWLEDGMENT

Firstly, God above all. Thank you, God, for thus far you have brought me. I extend my deepest gratitude to the individuals and UCU for having supported me throughout this research journey. I am indebted to my supervisor, Madam Elsie Nsiyona, for the invaluable guidance, expertise, and encouragement throughout. Your mentorship has been instrumental in shaping my research and intellectual growth. The love and patience of the family and friends as usual remained a constant source of strength. My family and friends, their sacrifice has enabled me to give this research time and energy. Special thanks to Mr. Bulafu Abbey Peter for being my constant source of support, encouragement, and continuous guidance from the word go. I don't take it for granted and I am forever grateful. To Uganda Christian University, I am grateful for the resources, facilities, and academic environment that aided my research. Much thanks to all respondents including students, lecturers, administrators, support staff, international students, and everybody that took their time to answer my questionnaire and even those who spared a few minutes for interviews. Your responses have been the back bone of my findings. I also want to thank me for not giving up even when things became harder than I thought. I thank God am still alive

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ABSTRACT

The purpose of this study was to examine the factors influencing the demand for coffee at Uganda Christian University (UCU). Specifically, the study focused on the effect of income and price, demographics, values and beliefs, and perceptions on coffee consumption at UCU. Data was collected from a sample of 128 respondents using a self-administered questionnaire. The researcher employed purposive and simple random sampling techniques to collect data. The data was analyzed using descriptive statistics, correlation, and regression analyses. The findings revealed no significant relationship between income/price and coffee consumption (an adjusted R-square of 4.4%, $p > 0.05$). However, values and beliefs significantly affected coffee consumption, producing an adjusted R-square of **16.1%** and a significant relationship ($p < 0.01$). In addition, perceptions about coffee's benefits such as its ability to improve focus were positively associated with consumption frequency (adjusted R-square of **21.8%**). The results of the regression analysis indicated that values and beliefs were the strongest determinant of coffee demand, with a standardized coefficient (β) of **0.454**, $p =$ **0.000**. The study recommended that UCU coffee vendors should revise their pricing strategies to improve affordability, raise awareness on the benefits of coffee, and enhance the coffee-drinking experience for students to increase demand.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

This chapter covers the background to the study, statement of the problem, the general objective of the study, specific objectives of the study, research questions, and scope of the study, significance of the study, the conceptual framework, and definitions of key terms.

1.1 Background

Agriculture is, therefore, the critical determinant in the efforts at reducing poverty and hunger, as well as increasing foreign earnings, since over 50% of Ugandans are involved in this sector, while it is also a major source of government income. Its production and exports are closely linked with the growth and development of the country. Chuhan-Pole and Angwafo, 2011 assert that the agrarian sector in the country still characterizes by low productivity, partly as a result of inadequate modern farm inputs, low public and private investment, and underdeveloped value chains. According to ICO, 2023, coffee continues to be the central commodity in the Uganda economy, providing a very significant contribution to agricultural output and export earnings. After Ethiopia, Uganda is the largest exporter of coffee on the African continent, offering a myriad of varieties from both Arabica and Robusta. For many rural communities, the sector provides livelihoods for about 1.7 million households spread across the country.

According to the UBOS Report, 2022, despite the economic importance of the crop, Uganda faces challenges in maximizing its benefits. The production level of the crop has shown high volumes, though with relatively low domestic consumption. For instance, Uganda is known

for good coffee beans, yet the consumption within the country remains low compared to volume exported to international markets. In 2018, Ugandans consumed only 3% to 4% of the coffee produced in the country, according to a parliamentary committee report presented by UCDA.

According to Mwesige, G., & Ssegunya, H. 2019, Ugandan coffee owes its genesis to Malawi and the Ethiopian highlands. It was introduced in 1900 to provide revenue to the British colonial government; hence some Ugandans associate it with forced colonial labor, hence the name Kiboko, meaning to whip or to cane in Kiswahili. According to UCDA, 2023, Uganda produces high-quality wet-processed Arabica, with the majority produced by smallholder farmers. Coffees marketed as 'Wugar'-Washed Uganda Arabica, or 'Drugar'-Dry Uganda Arabica, are grown on mountains bordering the Democratic Republic of Congo along Uganda's western border. Coffee is mainly grown in the central and southern districts, with about 57%, Eastern Uganda 23%, Western Kassese 10%, while the rest of the areas like Mpigi, Wakiso, Rakai are non-traditional and account for about 10%.

According to UBOS, 2022 statistics, the average annual production in Uganda was 4 to 5 million 60-kilogram bags, of which a greater percentage was Robusta. In fact, approximately 80% of the country's coffee production is comprised of Robusta and the remainder Arabica. Most of the coffee produced in the country is exported to international markets across Europe, Asia, and North America, therefore increasing foreign exchange earnings.

According to ICO, 2023, although supported by a robust level of production, domestic coffee consumption in Uganda remains very low compared with export volume. The major export markets for Ugandan coffee are international: Europe, Asia, and Northern America are the major consumers, and this is so because Ugandan Robusta holds a better quality and different flavor profile.

According to Mwesige & Sseguya (2019), some of the selected challenges facing Uganda's coffee sector include price volatility, fluctuating global market demands, and limited value addition infrastructure. All these hinder income stability at the level of farmers and further depress the expansion of local consumption. Efforts to address these challenges include promoting local coffee consumption through educational campaigns and investing in infrastructure for value addition. As per UCDA (2024), improving quality standards and enhancing productivity through better agricultural practices are also crucial steps toward strengthening Uganda's coffee sector.

The production of coffee in Uganda is driven by its economic significance, favourable climatic conditions, and global market demand. Coffee cultivation provides a vital source of income for rural communities and contributes significantly to Uganda's agricultural sector, making it a crucial component of the national economy (Mwesige & Sseguya,2019).

Uganda Christian University is one of the largest private institutions in Uganda, located in Mukono. The university was founded in 1997 and has grown to become one of the top universities in East Africa, committed to academic excellence, Christian values, and community service. UCU was founded by the Province of the Church of Uganda and perceived the need to establish a university that would provide quality higher education on Christian principles. In 2004, it got a charter from the government of the Republic of Uganda to confer degrees, diplomas, and other awards.

The main campus of UCU is located in Mukono, about 18 kilometres east of Kampala, the capital city of Uganda. The campus is set on a spacious and scenic landscape, thus providing a conducive atmosphere for learning, research, and community engagement. Facilities at UCU include modern classrooms, lecture halls, laboratories, libraries, student accommodation, sports facilities, and recreation spaces. UCU is situated in Mukono District,

which is close to the coffee-producing areas of Central Uganda, such as Masaka and Mukono. This proximity provides easy access to local suppliers of coffee and advances the interaction with coffee farmers.

The UCU stipulates a diverse community of students, faculty, and staff drawn from various backgrounds and regions of Uganda. This makes the university a microcosm of the population and consumer preference of Uganda, hence appropriate for studying and influencing local consumption patterns.

1.2 Problem Statement

The problem being examined in this study is that despite Uganda's heavy role in the world as a major producer of coffee, with robust production levels primarily of Robusta variety, the country faces a critical challenge of low domestic consumption. In 2018, UCDA reported that domestic consumption has remained very low at about 3-5 % of Uganda's total annual coffee production. According to UCDA's monthly report, there was a total export of 553,529 60-kilo bags of coffee in the month of June 2023. USDA Foreign Agricultural Service, 2023, further observed that a total of 300,000 bags of coffee are consumed against 4 million bags exported annually according to UCDA, 2023. This imbalance between high production and narrow local consumption creates economic susceptibilities as Uganda is dependent on volatile international markets for its exported coffee. Moreover, the underutilization of coffee within Uganda itself diminishes potential economic benefits that could accrue from increased local consumption, such as enhanced income generation for farmers, economic diversification, and cultural preservation.

According to an article by Daily Monitor, 2021, although international demand for Ugandan coffee remains high, domestic consumption remains low owing to a number of factors, which

include limited awareness and preference for other beverages, coupled with a lack of infrastructure for value addition and marketing within the country. This not only has consequences for the sustainability of the coffee sector in Uganda but also reinforces economic inequalities and vulnerabilities within communities that produce coffee.

As per Razzaq and Razzaq, 2015, one of the basic concepts prevalent at the home and economic level is that of consumption. The expenditure on household consumption is meant to fulfill their needs and wants. As mentioned by Sandu, C. (2012), all commodities- durable and nondurable is inclusive under household consumption. Budget planning takes spending consumption into consideration because such expenditure comprises a huge percentage of GDP; policymakers also take into account how consumption changes when there is a change in income. However, this, according to Solange (2018), does not explain why individuals consume less coffee in some regions. Therefore, addressing the low domestic consumption of coffee in Uganda, particularly through promoting and increasing local consumption at institutions like UCU, becomes imperative if economic flexibility is to be strengthened, dependency on global markets reduced, and maximum socio-economic benefits derived from coffee production in the country.

1.3 Purpose of the Study

This study therefore, seeks to investigate and propose strategies that would increase local consumption of coffee in Uganda, with focus on Uganda Christian University (UCU).

1.4 Objectives of the Study

The study was guided by the following objectives:

1) To find out how income and price have an impact on demand for coffee.
2) To study the impact of demographics on coffee demand.

3) To investigate the impact of values and beliefs on coffee demand.
4) To test the effect of perception on coffee demand.

1.5 Research Questions

The following research questions were used in order to achieve the desired objectives in Section 1.4

1) What is the effect of income and price on demand for coffee?
2) What is the effect of demographics on demand for coffee?
3) What is the effect of values and beliefs on demand for coffee?
4) What is the effect of perception on demand for coffee?

1.6 Significance of the Study

The demand for coffee by students and faculty at UCU is the focal point of this study, and such research results will be very valuable in the development of the Ugandan coffee sector, the UCU community and local businesses, and national policy within the coffee industry.

Although Uganda is one of the major coffee producers, its domestic consumption still lies quite low. This research, therefore, focusing on UCU as a small-scale context, can contribute to addressing this challenge. By analysing coffee consumption patterns and proposing strategies to increase the local demand at UCU, the study can serve as an important stepping stone for broader national initiatives. The International Coffee Organization (ICO) emphasizes the importance of understanding consumer behaviour to strengthen domestic coffee markets (ICO 2024). If replicated across Ugandan universities and institutions, the findings could lead to a significant rise in domestic coffee consumption, fostering economic growth within the Ugandan coffee sector (Uganda Coffee Development Authority.

Increased local coffee consumption at UCU would benefit not only the national coffee industry but also the university community and local businesses. As the proposed strategies for promoting awareness and appreciation for Ugandan coffee, this can help grow a more vibrant coffee culture within UCU. This, in turn, could lead to the creation of new on-campus cafes or partnerships with local coffee businesses, potentially generating new revenue streams and employment opportunities (Omrani, 2023). Local Mukono coffee roasters and cafes near UCU stand to gain from a rise in student and faculty demand for Ugandan coffee, fostering economic activity within the local community.

Results from this case study provide a basis for some key national policy decisions to encourage domestic consumption of coffee in Uganda. Policy makers will identify the preferences and challenges of consumers in factors that affect coffee choices at UCU. Such knowledge will help the government design focused, specific interventions-from education campaigns, subsidies to local roasters, or infrastructural development to provide access to high-quality Ugandan coffee throughout the country.

1.7 Scope and Limitations

1.7.0 Scope of the Study

The scope of the study covered the geographical scope, the content scope, and the time scope

1.7.1 The Geographical Scope

Uganda Christian University's main campus in Mukono is located in Mukono District, which is part of Uganda’s Central Region. Mukono District is situated in the Central Region of Uganda, bordered by Kayunga District to the north, Buikwe District to the east, Kalangala District to the south, and Wakiso and Kampala Districts to the west.

The urban setting of Mukono Town and the presence of a large student and staff population from different regions provided a diverse demographic for the study. The commercial vibrancy of Mukono Town, with its various businesses and markets, can influence coffee consumption patterns and preferences. Understanding the local cultural context and its influence on coffee consumption can provide deeper insights into consumer behaviour.

1.7.2 The Content Scope

The content scope of this study encompasses a detailed investigation into the demand for coffee at Uganda Christian University's Mukono campus. It included an analysis of global and local coffee market trends, the historical and economic context of coffee production in Uganda, and the application of consumer behaviour theories to understand coffee consumption. The study examines various factors influencing coffee consumption among UCU students and staff, such as cultural, economic, social, and psychological aspects. It employs a mixed-methods approach, combining quantitative surveys and qualitative interviews and focus groups, to gather comprehensive data. The scope also covered the development of strategies to increase local coffee demand, supported by policy recommendations and an implementation plan. Ethical considerations, data analysis techniques, and the limitations of the research were also addressed. The study aimed to provide valuable insights into coffee consumption patterns, contributing to academic knowledge and practical implications for the coffee industry in Uganda.

1.7.3 The Time Scope

The time scope of this study spanned from August 2024 to September 2024. The research period included an initial phase of literature review and methodology development from August to September 2024, followed by data collection through surveys, interviews, and

focus groups conducted in September 2024. Data analysis will take place from August to September 2024, allowing for a thorough examination of both quantitative and qualitative data. The final phase, September 2024, focused on compiling the findings, formulating recommendations, and writing the dissertation. This timeline ensured that the study was comprehensive and allows for any necessary adjustments or additional data collection if required.

1.8 The Justification of the Study

The justification of this study was founded on the significant economic and cultural importance of coffee in Uganda, juxtaposed with the relatively low domestic consumption rates. Despite Uganda being the second-largest coffee producer in Africa, a substantial portion of its coffee is exported, with domestic consumption remaining limited (UCDA, 2020). Increasing local demand can provide a more stable and sustainable market for Ugandan coffee farmers, reducing their vulnerability to international market fluctuations (ICO, 2019).

Focusing on Uganda Christian University (UCU) provides a unique opportunity to understand coffee consumption behaviours within a microcosm that reflects the broader Ugandan society. The diverse demographic composition of UCU's students and staff offers a valuable sample for examining various factors influencing coffee consumption, such as cultural, economic, and social dynamics. Furthermore, the study's findings can inform university policies and initiatives to promote a coffee culture, enhancing the overall well-being and productivity of the university community. Ultimately, this research will contribute to academic literature on consumer behaviour and demand analysis in developing countries, offering practical implications for stakeholders in Uganda's coffee industry-happing consumption patterns and fostering new cultural norms (Smith et al., 2018).

1.9 The Definitions of Key Terms

Coffee Consumption: The quantity of coffee consumed by individuals or groups over a specified period. This can be measured in terms of cups per day, kilograms per year, or other units of measurement relevant to consumption studies.

Demand Analysis: A systematic examination of the factors that influence the demand for a product or service. In this study, it focuses on understanding what drives the consumption of coffee among the population at Uganda Christian University.

Independent Variable: A variable that is manipulated or categorized to determine its effects on the dependent variable. In this study, the independent variable encompasses factors such as income, price, demographics, values, beliefs, and perceptions related to coffee consumption.

Dependent Variable: The variable that is measured to see how it is influenced by the independent variable. In this context, the dependent variable is the demand for coffee among students, staff, and faculty at Uganda Christian University.

Demographics: Statistical data relating to the population and particular groups within it. This includes factors such as age, gender, income level, education, and occupation, which can influence coffee consumption patterns.

Values and Beliefs: Deeply held principles and convictions that guide behaviour and decision-making. In the context of this study, values and beliefs about health, social status, and cultural significance of coffee can affect consumption.

Perception: The way in which coffee is viewed or understood by individuals, which can be influenced by advertising, personal experiences, social media, and word of mouth.

Uganda Christian University (UCU): A private university located in Mukono, Uganda, which serves as the geographical and contextual focus of this study. UCU provides the setting for analysing the local demand for coffee among its community members.

Local Demand: The demand for coffee within a specific, localized area, in this case, Uganda Christian University. This contrasts with broader regional or national demand and focuses on the unique factors affecting consumption within the university environment.

1.10 The Conceptual Frame Work

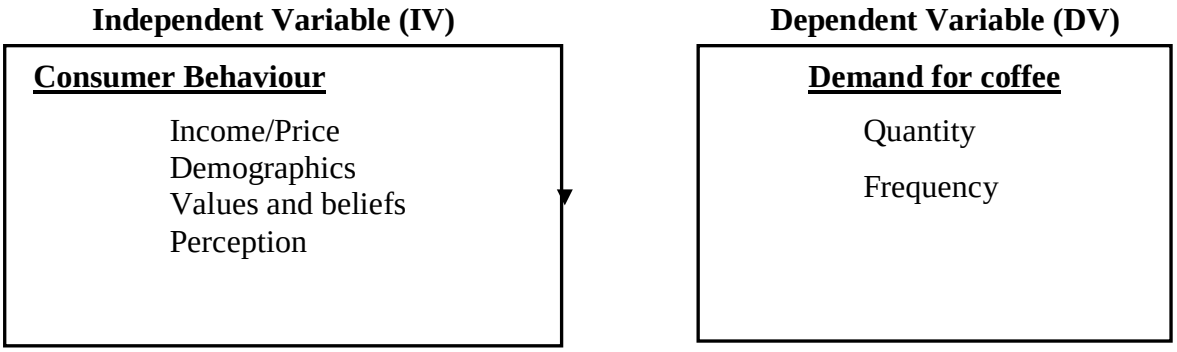

Figure 1.1: A Conceptual Framework

The conceptual framework in Figure 1.1 is a depiction of the relationship between consumer behaviour, which is the independent variable, and demand for coffee, which is the dependent variable. Consumer behaviour will be measured in terms of Income/price, demographics, values and beliefs, and perception while demand for coffee, which is the dependent variable, is measured in terms of quantity, and frequency. The relationship that can be drawn out of the depiction in Figure 1.1 is that with more awareness, better pricing, better quality coffee offered to the staff and students of UCU on various corporate governance issues, the consumption of coffee will start to improve.

1.11 Conclusion

In this chapter, the researcher explored an overview of the problem – Demand Analysis of Coffee in Uganda through sections as background to the study, problem statement, purpose and objectives of the study, the scope, justification and significance of the study and the conceptual framework that was used to guide the study. Chapter two presents, in more detail, definitions and previous studies about the dependent variable and independent variable.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is on literature review. The chapter presents a critical appraisal of the theories related to demand analysis of coffee. At the end of the theoretical review, the chapter presents an empirical review of literature on each of the specific study objectives spelt out in Chapter One. The chapter

2.1.0 Theoretical Review

The demand for coffee in Uganda calls for revisiting some of the various theories explaining the factors influencing its consumption. These theories relate to consumer behavior, market dynamics, and decision processes. This section is thus dedicated to discussing those theories relating to the demand for coffee at UCU. These include the Theory of Consumer Behaviour, Price Elasticity of Demand, Theory of Planned Behaviour, Maslow's Hierarchy of Needs, and Diffusion of Innovations Theory. These are discussed in Sub-sections 2.1.1, 2.1.2, 2.1.3, 2.1.4, and 2.1.5 respectively.

2.1.1 Consumer Behaviour Theory by Samuelson 1948

Consumer behaviour theory, which Samuelson 1948 proposes, remains an elementary theory in understanding how individuals make a choice so as to spend their income on the goods and services available in the market. This theory bases its argument on the principle of utility maximization where a consumer always aims to maximize the level of his satisfaction given his budget constraint. Lancaster, 1966, expanded this notion by suggesting that it is not the good itself, but rather its attributes that represent the source of satisfaction derived by the

consumer. Becker, 1976, added further to this innovation by incorporating household production along with time allocation into his argument, highlighting that these consumer choices are based on monetary as well as non-monetary reasons.

The Theory of Consumer Behaviour helps analyze the demand for coffee, taking into consideration aspects such as preference, income levels, price sensitivity, and perceived value of coffee. For example, at UCU, students and staff may well budget for coffee according to the perceived utility derived from it, compared to other beverages or activities. These can be researched through the use of surveys and observational studies, whereby a set of variables is observed to stipulate what motivates the demand for coffee. The study can therefore apply the theory to determine how consumer coffee choices at UCU are influenced by different attributes of the product such as taste, quality, and price. Consumer choice processes, as evidenced by prior research by Gustad and Nyqvist (2014), depict how information inputs are processed in order to arrive at a certain decision.

While decisions are made through the choice that the consumer is most attracted to according to Arnold et al. (2018), judgments depend on how the consumers rate the alternatives offered and their feelings towards them. According to Ahsan et al. 2019, since culture has determined what the consumers want and need it affects consumer behavior. In a consumer culture, it is the markets that serve as conduit between lived culture and social resources and between meaningful ways of life and the resources they require. Gleim, et al (2013), define that a coffee shop or consumption location is a form of restaurant. 2.1.2 Price Elasticity of Demand by Marshall (1890)

The price elasticity of demand, as formulated by Marshall (1890), forms the backbone for understanding how changes in price or other determinants bring about responses in the quantity demanded of the good.

This theory states that a product whose price elasticity is high would show a tremendous fluctuation in demand due to price changes, and the product with low price elasticity will see less variation in demand. Nerlove, 1958; Friedman, 1976 proved that price elasticity plays a significant role in consumer demand and also in market strategy, giving the base to analyze the effect of price alteration on consumption. As per Hansen, 2010, the price is a determining factor and is a major intrinsic and extrinsic factor influencing purchase intention of coffee.

According to Liu (2019), green products, meaning those that are environmentally friendly, are products whose cost is higher because of the much more expensive accreditations and raw materials used in their production. Price, then, represents the most significant obstacle to green consumer behaviour. As Kilbride (2017) and Gleim (2013) pointed out, coffee supply, consumption, and price were never easy to predict. This can be applied at UCU to determine how responsive the students and staff are to the price elasticity of demand for coffee.

This would be important information in determining an optimal price-setting strategy that maintains adequate affordability along with profitability. For example, when it is concluded that the demand of coffee at UCU is elastic, a small increase in the price may lead to a large fall in consumption. In other words, when the demand is inelastic, the quantity demanded would not differ significantly by change in prices. The estimates of the price elasticity of coffee at UCU can be deduced through historical sales data and price experiments that would serve to formulate effective policies on pricing that maximizes revenue while maintaining demand. 2.1.3 Theory of Planned Behaviour by Ajzen 1991

Ajzen's Theory of Planned Behaviour, 1991, stipulates that from a psychological viewpoint, consumer behavioural activities are motivated by intentions, functionally influenced by attitudes towards the behaviour and subjective norms, as well as perceived control over the conduct of the behaviour. This theory has been greatly applied in attempts to predict a variety

of health-related and consumer behaviours, evidenced from studies by Conner and Armitage, 1998. The theory provides a wide framework in understanding motivational drivers underlying coffee consumption at UCU.

Using the Theory of Planned Behaviour in this regard allows for an explanation of social and psychological factors influencing demand for coffee among students and staff of UCU.

It may be because attitude towards the consumption of coffee, social influence by peers, and perceived facilitation or hindrance to having coffee impinge on consumption patterns. To this end, it would therefore be proper to do a survey or focus groups on these aspects in that they show motives underpinning consumption behavior. By identifying such motives, potential interventions can be provided to help stimulate demand, from running promotional campaigns to adjusting the availability and access to coffee on campus. 2.1.4 Maslow's Hierarchy of Needs by Maslow 1943

Maslow's Hierarchy of Needs: "A motivational theory provided by Maslow, 1943; he considers that human needs are organized in a hierarchy: physiological needs, safety needs, love and belongingness needs, esteem needs, and self-actualization needs. Thus, the concept gives a framework to appreciate how coffee consumption at UCU can satisfy higher-order needs than the mere physiological need for a drink.

Applying Maslow's hierarchy can be used to analyze the larger impact that consuming coffee at UCU has on its students and staff.

To some, coffee is far more than a drink; it serves as a source of fulfilling social needs through social interaction and a sense of belonging in social places like a coffee house or cafeterias. Additionally, it will further have the effect of enhancing self-esteem by turning out to be part of the daily routine that adds to how one images themselves. This will lead to an

understanding of what level of Maslow's hierarchy the consumption of coffee fulfills amongst UCU students and staff, therefore making marketing communications and product offering more relevant thus improving their experience. 2.1.5 Diffusion of Innovations Theory by Rogers 1962

The Diffusion of Innovations Theory, introduced by Rogers (1962), explains how new products, ideas, or practices spread within a society or from one society to another. This theory identifies different categories of adopters: innovators, early adopters, early majority, late majority, and laggards. Rogers' work has been instrumental in understanding how innovations are adopted and the factors that influence the rate of adoption.

The degree to which new coffee products, brewing methods, or brands are adopted by the students and staff at UCU will give development strategies for marketing and product development.

By knowing both the categories of UCU coffee consumers and the influences on their adoption process, the study will be able to guide effective promotional and educational efforts in order to assist in the diffusion process of new coffee-related innovations. For instance, targeting early adopters with new coffee products and using their influence to encourage the early majority to adopt will help speed up the diffusion process and, eventually, increase overall coffee consumption on campus. 2.2 Empirical or Actual Review of Literature

This section covers literature related to extant studies on the effect of income and price on demand for coffee, the effect of values and beliefs on demand for coffee, the effect of demographics on demand for coffee, and the effect of perception on demand for coffee.

2.2.1 Income and Price Elasticity of Demand for Coffee

Income and price are the two most pivotal factors of demand for coffee.

Generally, while a higher income increases the consumption of coffee, it is usually shifted to high-quality and premium products. The quantity demanded reduces if the price increases, though elasticities might vary depending on the kind of coffee and the preference of the consumer. Basically, understanding such dynamics is important in view of analyzing the demand for coffee at Uganda Christian University and informing the development of strategies to improve the situation with respect to local coffee consumption. The combined effects of income and price on coffee demand can be complex.

For instance, higher income levels might mitigate the negative impact of rising coffee prices, as wealthier consumers can afford to maintain their coffee consumption despite price increases. Conversely, lower-income consumers might be more sensitive to price changes and reduce their consumption when prices rise. This in turn is an interaction where one can apply cross-price elasticity, showing how the demand of coffee has changed because of the price changes of related goods such as tea or soft drinks. Income is a basic determinant of consumer behavior. It directly relates to the demand for coffee. As indicated by the theory of economics, when the income of consumers increases, the resultant effect is increased purchasing power, hence the ability of such consumers to buy more of the product than previously. This can be analyzed through the concept of income elasticity of demand, which describes responsiveness in the quantity demanded of a good resulting from changes in the consumer's income.

The income elasticity of demand for coffee is positive since increases in income rise by an increased demand for coffee. However, responsiveness might be diverse. It can be lower for normal or basic coffee, being a necessary commodity, while higher for specialist and high premium coffee brands. In other words, as incomes grow, households are more likely to shift

from regular to premium coffee, reflecting their preference for quality and better-tasting merchandise.

Bils and Klenow, 2001 state that with an increase in income, there is a consumption of luxury commodities. In regard to coffee, the National Coffee Association's report in 2019 found that U.S. households comprising a higher income spent more on coffee, including premium varieties.

Income levels are important determinants of the coffee consumption pattern in developing countries like Uganda. Households and individuals that accrue higher incomes tend to have a higher frequency of coffee consumption and prefer better qualities of coffee products. The Uganda Bureau of Statistics in 2019 showed that urban areas, being relatively high-income level regions, record higher frequencies of coffee consumption compared to rural areas.

Price is another important determinant that affects the demand of coffee directly.

The law of demand states that, all other factors held constant, the price of the good and the quantity demanded are inversely related. That means as the price of the coffee increases, normally it leads to a decrease in quantity demanded and vice versa. Price elasticity of demand is described as the measure of how responsive the quantity demanded of a certain good is due to changes in its price. Price elasticity for coffee will, therefore, differ with respect to the type of coffee, the availability of its substitutes, and preference by the consumer. For example, basic coffee may be inelastic in that it is a commodity to many consumers, whereas specialty coffee is elastic: if its price goes up, then the consumer switches to some other expensive drink. Deaton and Muellbauer 1980 show the result that coffee demand in the UK is price elastic. Subsequently, it was shown that when the price of coffee increased, the quantity demanded fell considerably. A study in Greece by Andriotis

and Chryssochoidis 2000 showed that whenever the price of coffee increased, the response was either to consume less coffee or eventually to switch to cheaper substitutes.

Some key factors which determine the price sensitivity of demand for coffee in Uganda include income levels and availability of close substitutes.

A study by Kibet et al. (2011) revealed that coffee prices in Uganda have a strong impact on its consumption, particularly in low-income households. High prices can thus reduce consumption, and it is even possible for people to switch to other drinks, like tea. On the other hand, a reasonable price can encourage demand for coffee, especially in the case where consumers perceive it as an affordable indulgence. 2.2.2 Effect of Demographics on the Demand for Coffee

Demographic factors greatly influence the demand for coffee. It involves different variables such as age, sex, education, occupation, and geographical location. Each of these demographic variables has a different influence on the pattern of consumption of coffee and leads to an overall demand for coffee in various regions for different groups of consumers.

Age

Young adults tend to be the most avid consumers of coffee.

They tend to drink coffee for its stimulating effects, which help them manage busy lifestyles that include studying, working, and socializing. Specialty coffee shops and cafes are particularly popular among this age group, who often seek unique Flavors and premium coffee experiences. Studies have shown that this demographic is more inclined towards specialty coffee drinks and is willing to pay a premium for quality and ambiance (Mintel, 2018). For many middle-aged adults, in particular, it is an essential part of the day's routine,

combined with a healthy dose of productivity and alertness at offices. So, this is the group interested in investing in home coffee makers or attracting attention to convenient ways to make quality coffee at home, such as single-serve pods or premium ground coffee. A study by the National Coffee Association (2019) found that 48% of coffee consumers aged 18-24 drink specialty coffee, compared to 30% of those aged 25-39, 63% of adults aged 35-54 drink coffee daily, indicating a strong, habitual consumption pattern. Furthermore, research indicates that older adults appreciate the routine and comfort associated with coffee consumption (Euromonitor International, 2020). Coffee Science Information Centre, 2017, reported that the daily coffee drinkers aged 55 years and over comprised of 76% of the total. This age bracket could view health benefits as an important reason for coffee consumption and therefore be interested in brands with quality and consistency as a niche. Gender: Males consume more coffee than females, basically using it to energize themselves for work and other activities.

They might drink more coffee throughout the day, especially during working hours.

Trend-wise, men show a preference for stronger and more robust flavors in coffee and are lesser influenced by flavor or specialty trends in coffee consumption. According to Mintel's survey conducted in 2018, 54% of men drink coffee daily compared to 46% of women. In comparison, women are more likely to consume coffee as part of a social activity and may prefer milder flavors, flavored, or specialty coffee beverages. They are also more likely to take the health effects of their coffee consumption into consideration and thus tend to drink organic or decaf coffee. The coffee drinking behavior of women is often shaped by the social atmosphere they want to create for themselves and others around them. The National Coffee Association (2019) further indicates that 57% of females aged 18-29 years prefer specialty coffee coffee drinks, as opposed to 43% for the men within the same age group. Education

Educational attainment influences the coffee consumption pattern, often being related to income levels and lifestyle.

More educated people consume more coffee, probably because their academic and professional life is very demanding, requiring them to be vigilant and alert.

Specialty and premium coffee products will also be more appreciated by this group and sought after. Generally speaking, the greater the discretionary income that usually comes with higher educational attainment, the more frequently it can buy more expensive coffee. According to Euromonitor International, in 2020, 68% of college attendees drank coffee every day, while 54% did among those with only a high school education. Lower education consumers still drink coffee but their tendency will shift to more accessible and cheap varieties. Instant coffee and RTD coffee drinks are being consumed in this bracket because it is more accessible and cheap. According to Mintel 2018, 45 % of the people with a lower educational background drink instant coffee more regularly than 29% of the people with a higher educational background. Occupation Occupation has a significant impact on coffee consumption in jobs where hours are very long, and concentration is required high.

Individuals in such jobs often drink more than a couple of cups of coffee during working hours to stay active and attentive.

A combined effect of convenience from office coffee machines and the culture of coffee breaks all add to a high consumption rate in this group. Work environments favoring coffee consumption can greatly raise the total demand. The National Coffee Association, 2019 found that 77 percent of professionals drink coffee each day and a large percent do it at work. The consumption by manual laborers may be to derive energy before or during strenuous activities. However, the drinking habit of this group may still be constrained by the place and

opportunity to have coffee within working hours. For example, they may just want strong and instant coffee since it is quicker to make and gives them an immediate boost of energy. According to the Coffee Association of Canada (2018), 52 % of construction and manual labor drink coffee every day. Many also prefer their coffee strong and convenient to drink. Physical Location Its consumption is influenced by geographic locations because of cultural, economic, and availability factors.

The urban population typically consumes more coffee than people in the countryside, due to the higher disposable incomes, wider access to coffee outlets, and increased tempo of life in urban centers which demands quicker refreshments for rapid energy boosts. A higher number of cafes and coffee shops in an urban setup supports the higher consumption of the beverage. In fact, according to Euromonitor International, 2020, 70% of urban dwellers take coffee regularly compared to 55% of rural residents. Perhaps a smaller percentage of people may be consuming the beverage in the rural areas due to poor access to coffee shops besides lower disposable incomes. Yet, homemade coffee is still popular, and the consumption patterns can differ depending on local traditions and financial position. Rural customers tend to prefer more affordable and convenient kinds of coffee. According to Mintel, 2018, 47% of rural customers use instant coffee, while for urban customers, this figure is only 32% 2.2.3 The influence of values and beliefs on coffee demand

Values and beliefs greatly bear on consumer behavior in respect to demand for coffee. The factors influence attitudes that individuals hold towards coffee consumption and, hence, their preference, buying, and consumption of the product. Values and beliefs can relate to everything from health and nutrition to the environment, ethics, and even religion.

Health Awareness

Health awareness is increasing day by day among consumers, which influences their decisions on food and beverage consumption, including coffee.

Accordingly, health-conscious persons may give more thought to nutritional content and possible health benefits or risks related to coffee consumption. For instance, research indicates that moderate consumption of coffee is related to a variety of health benefits that range from reduced incidences of diseases to even boosting brain activity. Various studies by the Harvard School of Public Health (2015) have shown that habitual coffee consumption is linked to a reduced risk of type 2 diabetes, Parkinson's disease, and certain types of cancers. These findings have encouraged health-conscious consumers to incorporate coffee into their lifestyles. Meanwhile, health issues related to extremely high consumption of coffee-anxiety problems, sleep disorders, and other stomach-related disorders-are preventing many from coffee consumption. Of these, O'Keefe et al. (2013) indicated that in some individuals, heavy intake of caffeine is related to cardiovascular diseases; therefore, health-conscious consumers tend to be cautious with regard to consumption of coffee.

In this regard, Bhupathiraju et al. 2013 report that a significant inverse association of coffee consumption with type 2 diabetes reinforces positive health benefits of moderate consumption. Similarly, Grosso et al. 2017 meta-analysis provided scientific evidence toward the protective effects of coffee against diseases, which impacts health-conscious consumers towards coffee. Environmental Concerns The environmental values and belief also play an important role in shaping up the demand for coffee.

They look for products which have been well-sourced and are able to be in tune with the environment. There is an increasing demand for green coffee, such as Fair Trade and organic coffee, wherein the production method is friendlier to the environment and farmers are paid a

decent wage. As revealed by the study of Samper and Quiñones-Ruiz (2017), consumers are willing to pay more for a cup of coffee that is certified to be produced with environmental sustainability in mind. This trend is especially well-seated within developed nations where environmental awareness is high. Those consumers who are conscious about their carbon footprint might want to buy local coffee just to reduce the emission from transport modes or purchase a brand that has eco-friendly packaging. In support, Specialty Coffee Association in 2018 shows that environmentally concerned consumers would like a brand that can show their sustainability concerns through transparency and eco-friendly activities.

For example, Samper and Quiñones-Ruiz (2017) established from their findings that there is an increasing interest on the part of consumers in sustainable coffee, and they are willing to pay a premium price for "green" products. In a similar vein, the Specialty Coffee Association (2018) established that interest in brands positioning themselves as sustainable and transparent by consumers is increasing. Ethical Considerations Ethics-like beliefs about social justice and equity can be one of the strong determinants of coffee consumption patterns.

Fair Trade Coffee

Fair Trade certification ensures that the coffee farmers are fairly paid and that humane working conditions apply.

In fact, many consumers drink Fair Trade coffee just because of the ethical reasons, such as support for social justice and fair labour. As such, De Pelsmacker et al. (2005) indicate that ethical consumers pay a premium price for their Fair Trade coffee simply because they see themselves making a highly valuable act of being responsible socially. Brands which fullheartedly support ethical practices via Corporate Social Responsibility, that could be in

the guise of community outreach and investing in sustainable agriculture, appeal to these kinds of customers quite easily. On the other hand, Mohr and Webb 2005 also note that consumers are more likely to buy coffee from companies perceived to have good CSR records; thus increasing demand for the products. De Pelsmacker et al. 2005 report that ethical consumers pay premium for Fair Trade coffee owing to their interest in supporting fair labour practices and social justice.

Mohr and Webb (2005) alluded to the role of CSR as a factor that can determine consumer preference; the more ethical consumers tend to prefer brands seen to pursue responsible business operations. Cultural Traditions Coffee consumption is determined by cultural values and beliefs.

The role of cultural traditions is influential in shaping how, when, and with whom it is consumed, and even its symbolic meanings. It signifies the socialization of people in many cultures. For instance, espresso plays a significant role in social networking in Italy whereas the traditional coffee ceremony represents the culture of Ethiopia. Interestingly, during a research, Topik and Clarence-Smith (2003) found that coffee as beverage had occupied a cultural significance in the majority of societies and its usage encourages social bonding and communal harmony.

Cultural preferences also have a bearing on the kinds of coffee consumed. For instance, Turkish coffee, which is thick in nature, has a very unique way of preparation and is very historical in Turkish culture, is preferred by most Turkish consumers. Similarly, Scandinavian countries have a high per capita coffee consumption rate, influenced by cultural traditions of coffee drinking during social gatherings and breaks (Nordic Coffee Culture, 2018). Topik and Clarence-Smith (2003) emphasized the cultural significance of coffee in fostering social interactions and community ties. The 2018 study on Nordic Coffee Culture

found that the high consumption rate of coffee is enlarged by cultural tradition from Scandinavia, where the beverage is integral to social and cultural life.

Values and beliefs include health consciousness, concern about the environment, ethical issues, and cultural traditions that affect demand for coffee. If the manufactures and marketers of coffee understand such influences, they can be in a better position to meet the diverse preferences and values of their target customers. Therefore, communicating health benefits, sustainability, ethics, and cultural congruence may be used to further increase demand and consumer loyalty across various market segments. 2.2.4 Perception's Impact on Coffee Demand

Perception plays an important role in consumer demand for coffee. Perception relates to quality views, health notions, brand image, and what customers hold in terms of the coffee experience. These perceptions are driven by marketing activities, personal experiences, social factors, and cultural norms. Good and bad perceptions are capable of substantially influencing the habit of purchasing and consumption.

Consumers often equate a higher quality with a better taste, better ingredients, and an overall better coffee experience.

Those brands that manage to position their coffee as premium or gourmet are able to charge high prices and retain very loyal customers. For instance, Starbucks has managed to create a brand based on perceived quality and specialty coffee. According to a study by Kotler and Keller (2016), perceived quality is one of the principal drivers of choice since many customers were willing to pay more money for what they perceived as better coffee. Conversely, if the consumers would view the quality of the coffee as low, they would then later avoid buying the product even at lower prices. Whenever consumers have negative

perceptions about the taste, freshness, or origin of the coffee, the demand of such coffee drops. According to Zeithaml 1988, perceived quality is related to consumers satisfaction and purchase intentions, therefore negative perceptions have adverse effects on the performance of a product market. According to Kotler and Keller (2016), perceived quality remains one of the important factors affecting consumer choice. There, the authors highlighted that, by and large, high quality is related to better taste and higher quality ingredients. At the same time, this leads to a higher consumers' willingness to pay more for high-quality coffee. Grosso et al. (2017) performed a meta-analysis of the health benefits of coffee: positive health claims are found to enhance the appeal of coffee among health-conscious consumers.

While O'Keefe et al. (2013) focused on issues related to health, which was unsupported by scientific facts, may deter customers from consuming coffee. Positive perceptions of health benefits may increase demand for coffee. Ongoing evidence of research into potential health benefits, such as protection from chronic diseases and improvement in the mental alertness of moderate consumption of coffee, makes consumers who view health positively increasingly incorporate a daily cup of coffee into their routines. According to Grosso et al. (2017), a favorable view on health claims as a result of the consumption of coffee increases its appeal, particularly for the health-conscious consumer. Conversely, a negative health-related apprehension about the coffee, such as anxiety, heart problems, and digestive complications, lowers its appeal. The consumers who would feel adverse health perceptions about coffee would cut down on consumption or revert to alternatives such as tea or decaffeinated coffee.

Research by O'Keefe et al. (2013) indicated that negative health perceptions, although unsubstantiated by science, have a much stronger influence on consumer behaviour and can reduce demand considerably. Brand Image Aaker (1996) showed clearly that a well-developed brand image improves consumer trust and loyalty, thereby increasing demand.

The idea was further supported by Keller (1993), who established that brand image is part of brand equity, and it takes only very negative perceptions to reduce consumer trust and purchase intention substantially. A strong, positive brand image can go a long way in lifting demand for coffee. Brands perceived as reliable, stylish, or socially responsible attract a dedicated customer base. For example, Nespresso has been able to build up an intense brand image related to its quality and convenience, thus securing a considerable share of target premium consumers. As stated by Aaker (1996), brand equity, which comes with a good brand image, persuades the customer to have confidence in and be loyal to the brand. This, in turn, increases demand. The opposite is true for any coffee brand with a weak or negative image, which finds it challenging to win and hold on to customers. This may be ruined due to many issues such as inconsistent quality, adverse publicity, or poor customer service. According to Keller's research (1993), brand image is an important source of brand equity, and unfavorable perceptions can dramatically lower consumer trust as well as purchasing intentions. Branding of coffee products According to the institute for scientific information on coffee, a consumer study shows that branded coffee or marked with recognized, famous brands, fare better in the market than unbranded, unmarked, or less value coffee packaging Packaging is the "silent salesman." because its purpose is to attract consumers to make them buy the product. As indicated by Lautiainen, 2015, a brand is the distinctive name or logo assigned to a product with which to identify that it is from a particular business with a certain name. According to Marventano, 2016, a company's packaging communicates to its customers what the company stands for and what the company means to the consumer.

It is for this reason that the packaging of the products, therefore, is the brand's representation of the thing inside, is almost as important as the product itself. Overall Experience Overall, the experience associated with consuming the coffee right from the ambiance created in the coffee shops to the packaging and customer service can increase its appeal.

Those consumers who find the caffeine consumed in coffee rewarding and pleasurable will start to develop a habitual consumption pattern. The experiential nature of coffee has also been enhanced by the trend of fancy coffee shops and special brewing, therefore increasing demand. According to Pine and Gilmore 1999, consumer experience is one of the methods whereby consumers create value and develop demand for the product. Customers will, in fact, avoid buying coffee if they have a dissatisfactory experience with a brand or outlet in service, environment, or even the way the coffee is presented. Bitner's 1992 research brought out the fact that physical environment merged with service quality is of primary importance, which affects consumers' satisfaction and perception and, further, when negative, reduces demand.

2.3 Literature Review Summary

The literature review discusses different aspects of coffee consumption, mainly focusing on the Uganda context. The global overview of the coffee market highlighted various key trends and patterns across the world regarding coffee consumption, influenced by economic growth, cultural shifts, and marketing strategies (International Coffee Organization, 2023). The historical context also provides the economic significance of coffee in Uganda, coupled with the prevailing production statistics and its implication for the economy of the country (Uganda Bureau of Statistics, 2022).

Theories like the theory of planned behaviour proposed by Ajzen 1991, and the consumer culture theory as propounded by Arnould and Thompson 2005 set out frameworks that explain the drivers of consumption. These have also been applied to explain how cultural, economic, social, and psychological factors influence coffee consumption and drive demand. This is because consumer values, beliefs, and perception about coffee greatly influence their consumption habit, as shown by Smith et al., 2018 and De Pelsmacker et al. 2005.

It develops an in-depth analysis of factors affecting coffee consumption, where the role of cultural tradition, economic conditions, and social and psychological motivations are considerable.

Previous studies exist on the demand for coffee in Uganda, such as Mwesige and Sseguya (2019); these therefore give a general overview of the prevailing findings and gaps that this present study is targeting. This review has identified the interaction of a range of diverse influences that impact consumer trends in coffee. It therefore has required targeted strategies aimed at stimulating demand locally within Uganda Christian University. The synthesis of diverse strands of literature in this review has established a complete basis upon which to understand demand dynamics for coffee in Uganda, setting the background for the empirical analysis that follows.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The purpose of this chapter is to describe the methodology employed in the study. The chapter covers the research design, study population, area of study, sample size, sampling techniques, the data collection methods, the data collection instruments, research procedures, data quality control, data management and analysis, ethical considerations, and limitations of the study.

3.1 Research Design

The research design employed in this study was the cross-sectional survey design. According to Sekaran (2003), this design aims at gathering data just once from a cross-section of sources for purposes of answering the research questions. The cross-sectional design also permits the establishment of causal relationships (Sarantakos, 2005).

In order to provide both qualitative and quantitative data from the chosen population, the study adopted both qualitative and quantitative approaches because the phenomenon under study had both quantitative and qualitative values. Qualitative methods are suitable for the collection of verbal data while the collection of numerical data requires quantitative methods (Babbie, et. al 2003). The application of these two research methods ensured that defects in one design were compensated for by the other. This was intended to enable the researcher understand of the factors affecting coffee consumption in UCU.

3.2 Area of the Study

The study was conducted at Uganda Christian University's main campus in Mukono District, Central Uganda. Mukono District is bordered by Kayunga District to the north, Buikwe

District to the east, Kalangala District to the south, and Wakiso and Kampala Districts to the west.

3.3 Study Population

The study population comprised of 148 respondents classified in the following three departments, namely: administrators, lecturers, support staff, students and international students illustrated in table 3.1.

Table 3.1: Study Population

SNo.	Occupation	Population
1	Administrators	100
2	Lecturers	400
3	Support stuff	150
4	Students	7,350
5	International Students	500
	Total	**8,500**

Source: Field findings (2024)

3.4 Sampling Procedures

3.4.1 Sample Size

Out of a population of 8500 (see Table 3.1), a sample of 148 was determined using Krejcie and Morgan (1970) Table for size determination. This sample was deemed representative because it is within 90% confidence level of the target population that Kothari (2004) believes is a sufficient representation of the population.

Table 3.2: Occupation

SNo.	Occupation	Study Population	Sample Size	Sampling Technique

1	Administrators	100	10	Purposive Sampling
2	Lecturers	400	15	Purposive Sampling
	Support Staff	150	15	Purposive Sampling
	Students	7,350	95	Simple Random Sampling
3	International Students	500	13	Simple Random Sampling
	Total		**148**	

Source: Field findings (2024).

3.4.2 Sampling Techniques

Selection of respondents from a sampling frame of 148 respondents from UCU Mukono uses probability sampling. Two probability sampling techniques used include purposive and simple random sampling. The researcher has used purposive sampling to select lecturers, administrators, and support staff as respondents, since the respondents are income earners and therefore would have important information regarding factors that affect the consumption of coffee at UCU Mukono, such as income and price.

The respondents were selected from the local and international students using a simple random sample to ensure each member of the targeted population had an equal probability of being included in the sample.

3.5 Data Collection Procedure

In the process, both primary and secondary data were collected from UCU Mukono. This was possible after presenting a letter of introduction from the School of Business of Uganda Christian University signed by the coordinator to the management of UCU Mukono, seeking for permission to conduct research.

3.6. Data Collection Methods

The study employed the survey method of data collection in which respondents were required to provide answers in a pre-determined order. The survey method involved the use of a questionnaire and a semi-structured interview all aimed collecting primary data. For this particular study, a questionnaire of 32 items was administered to 148 individuals of the university. The items on the questionnaire covered the demand analysis of coffee. The semi-structured interview on the other hand, was meant to corroborate information obtained from the questionnaire.

3.6.1 Questionnaire Survey

The questionnaire survey was the primary means of collecting data with the view of making statistical inferences about the population being studied after collecting the data from the sample population selected both randomly and purposively as indicated in Table 3:2. During the survey, questionnaires were sent directly to selected respondent and the survey used a google form mode. It would be economical to carry out a questionnaire survey for a large sample size that is dispersed over a wide geographical area. The response rate would also be good as the selected respondents were given enough time to answer the questions at their convenience.

3.6.2 Interviews

The researcher employed semi-structured interviews as a method of collecting data. Interviews can, therefore, be justified as a means of data collection on the basis of the fact that the study being partly qualitative would require an intensive interaction with the informants in order to gain better insight into the research issues, and a collection of detailed

and in-depth information. There is more likelihood of getting responses. This is applied to purposively selected 45 employees of the university on an individual basis.

3.7. Research Instruments

This comprised a questionnaire and an interview guide supplemented by secondary data, which was to be collected using a documentary checklist.

3.7.1. Questionnaire

It was a self-administered questionnaire, with most of the questions being closed-ended, while a few on demographic data were open-ended. The SAQ contained five points of the Likert scale that were used in measuring the views on all the components of the constructs.

According to Kochik 2011, one merit of using the Likert scale questions is the simplicity within which the respondents rate a series of statements by having them circle, tick (√) or otherwise mark numbered categories-for example 1, 2, 3, 4, 5-thus easing the workload on the respondents in answering the questions and hence increasing the rate at which the persons being surveyed respond. The rating scale had a wide range of choices where the respondents were to indicate how their feelings matched the questions. The questionnaire was administered to the respondents through a google form

3.7.2. Interview Guide

The Interview guide contained only open-ended question. Its choice as a data collection instrument was dictated by the fact that no single research design can be purely quantitative. A given study can therefore be more quantitative with some qualitative aspects as well

3.8 Measurement of Variables

Income, price, demographics, values and beliefs, and perceptions were the independent variable factors measured in the study that affect consumer behaviour. The dependent variables on demand for coffee were assessed from the questions on quantity and frequency of consumption of coffee.

3.9 Data Management and Analysis

It ensured data management by designating responsibilities of every individual involved in the study, adequate storage, and backup provided for data collected, data security by providing access to the data and ensuring stability.

Qualitative and quantitative techniques of data analysis were used to analyze data summarize the essential characteristics and relationship of the data in order to form generalizations. The completed questionnaires were edited for completeness and consistency before processing the outcome.

3.9.1 Quantitative Analysis

Raw data quantitative data collected using the SAQ data was cleaned using advanced excel coding software so it is accurate, consistent and complete. After that, categorisation or coding of the responses was done. This was then followed by entry of data into the SPSS programme. The data was then analysed to generate descriptive statistics on the background information about the respondents each of the three constructs under the independent variable. Regressions were also done in order to test the effect of independent variable on the dependent variable.

3.9.2 Qualitative Analysis

First, having edited the qualitative data manually, categorized it into concepts, reviewed the data critically in order to clarify concepts and corroborating the data by evaluating alternative explanations, disconfirming evidence and searching for negative cases, content analysis was used to analyse it.

3.10 Ethical considerations

Ethical considerations were made to ensure that no one suffers adverse consequences from this research activity. First and foremost, consideration was made to get clearance before going out to conduct the study by obtaining a letter of introduction from the university to show that the study is approved. The letter was taken to UCU Mukono to seek permission from the management of the organisation to allow the researcher to conduct study.

Informed consent was also obtained wherein the researcher informed the respondents of the importance of the study so that it would provide them with full understanding of what the study is all about and what methods are to be used therein, its stated risk, burden, and what was demanded from them in order to solicit from them an informed permission to participate in the survey. Thirdly and last, confidentiality was maintained in the study by explaining to the respondents that information they were to provide would be kept confidential and that this this would be used for academic purposes only.

3.11 Limitations to the Study

Much as the study had limitations this did not hinder the researcher from carrying out the study. The main limitations encountered included time scope limitations, geographical scope limitations, and poor response rates. Considering the time scope, it is very important to note that the study focused on a very small period for data collection. Moreover, the research

problem touches on various factors affecting coffee consumption, which require a long period of time to study and also inadequate time to do further analysis. Though this was a limitation, the researcher was able to overcome this by making a comprehensive coverage by increasing the margin of error to 8% and interviewing respondents in different categories at the university.

The researcher also faced a problem of poor response rates. However, the researcher overcame this by creating rapport with the respondents and further reminding them from time to time with the help of a research assistant to fill up the questionnaires. In as far as the interview was concerned appointments were made with the respondents at their convenience. With this done, the response rates consequently obtained was above the acceptable levels.

3.13 Conclusion

This chapter has presented the methodology adopted to undertake the research. A descriptive design was adopted involving a case study strategy, associated with a mixed research approach. The sample size was determined by the Krejcie and Morgan table and arrived at by using purposive and simple random sampling techniques. The main method and tool of data collection employed were questionnaires supplemented by face-to-face interviews and review of documents. Ethical consideration was addressed, with the key issues being clearance by the university, consent, and confidentiality.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter is on the presentation, analysis and discussion of the findings of the present study on the demand analysis of coffee of UCU. The presentation, analysis and discussion was done in six sections with the first section being response rate, followed by the section on the background characteristics of the respondents.

This was followed by descriptive statistics Thereafter the first objective which was on the effect of income and price on demand for coffee, the second objective which was on the effect of demographics on demand for coffee, the third objective which was on the effect of values and beliefs on demand for coffee and the fourth objective which was the effect of perception on demand for coffee are presented. The last section of the chapter closes with a presentation, analysis, and discussion of findings on the primary objective of the study, which was to examine the Demand Analysis of Coffee in Uganda.

4.1 Response Rate

The sample of the study consisted of 148 respondents drawn from an estimated population of 8,500 respondents. Out of a sampling frame of 148 respondents, 128 responses were received giving a response rate of **85.8%.** While this is slightly lower than the desired target, it still provides enough data to derive insights about coffee consumption patterns at UCU. The distribution of the response rates is shown in Table 4.1.

Table 4.1: Response Rate

Statistics

		1: Respondent's Age	2: Gender	3: Level of education	4: Occupation	5: Years at UCU
N	Valid	128	128	128	128	128
	Missing	0	0	0	0	0

Source: Field findings (2024)

4.2 Background Characteristics of the Respondents

This section is on the various background characteristics. These characteristics include age, gender, position held, and years of service in UCU

4.2.1 Age of the Respondents

The ages of the respondents were categorised into those from 20 years and below, 21-30 years, 31-40 years, 41-50 years, and 51 years and above. The justification for the choice of age as a demographic characteristic in the study is because the inclusion of age brings out the true picture as to whether a respondent is a minor or major (Kothari 2004). The distribution of the respondents' age groups is shown in Table 4.2.

Table 4.2: Age of the Respondents

1: Respondent's Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	88	68.8	68.8	68.8
	25-34	26	20.3	20.3	89.1
	35-44	8	6.3	6.3	95.3
	45-54	3	2.3	2.3	97.7
	55+	3	2.3	2.3	100.0
	Total	128	100.0	100.0	

Source: Field findings (2024)

From Table 4.2 it can be noted that 88 respondents (68.8%) were aged 18-24 years, 26 of the respondents (20.3%) were aged 25-34 years, 8 of the respondents (6.3%) were aged 35-44 years, 3 respondents (2.3%) were aged 45-54 years, and 3 respondents (2.3%) were aged 55 years and above. This indicates that the majority of respondents were within the 18-24 age

group, which reflects the typical student demographic at UCU. The representation of older age groups was limited, meaning that the findings predominantly reflected the coffee consumption patterns of younger individuals.

4.2.2 Gender

The gender of the respondents was classified into male and female. The idea behind ascertaining the gender of the respondents is because collecting data that incorporates responses from both genders is more reliable than getting data from a single gender sample size. The results of the responses on gender are presented in Table 4.3.

Table 4.3: Gender

2: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	62	48.4	48.4	48.4
	Female	66	51.6	51.6	100.0
	Total	128	100.0	100.0	

Source: Field findings (2024)

As shown in Table 4.3, the respondents were nearly evenly split between females (51.6%) and males (48.4%). This slight majority of female respondents suggests a balanced gender representation, allowing the study to capture potential differences in coffee consumption behaviours between males and females at UCU

4.2.3 Level of Education

According to Sekaran (2003), it is important in any social investigation research to involve people that have attained an acceptable level of literacy and numeracy in order to be in position to understand and interpret content in the questionnaire. Due to this reason, the researcher deemed it fit to include a section on education level in the SAQ covering the

following levels: secondary, diploma or first degree, postgraduate and other. The responses are shown in Table 4.4.

Table 4.4: Level of education

3: Level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.	2	1.6	1.6	1.6
	2.	88	68.8	68.8	70.3
	3.	12	9.4	9.4	79.7
	4.	24	18.8	18.8	98.4
	Bachelors	1	.8	.8	99.2
	Doctorate	1	.8	.8	100.0
	Total	128	100.0	100.0	

Source: Field findings (2024)

The results in Table 4.4 depict that, 1.6% of the respondents had secondary education, 9.5% had diplomas or tertiary education, 68.8% had undergraduate education, 18.8% had postgraduate degrees, and 3.8% of the respondents had probably other qualifications. This implied that all respondents had attained a certain level of formal education that would help them in understanding the guidelines for demand for coffee and that the responses given would be perceived to be a true expression of their understanding of the factors driving the demand for coffee at UCU hence Uganda.

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Table 4.5: Age of the Respondents

3: Level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.	2	1.6	1.6	1.6
	2.	88	68.8	68.8	70.3
	3.	12	9.4	9.4	79.7
	4.	24	18.8	18.8	98.4
	Bachelors	1	.8	.8	99.2
	Doctorate	1	.8	.8	100.0
	Total	128	100.0	100.0	

Source: Field findings (2024)

The results in Table 4.5 depict that, 1.6% of the respondents had secondary education, 9.5% had diplomas or tertiary education, 68.8% had undergraduate education, 18.8% had postgraduate degrees, and 3.8% of the respondents had probably other qualifications. This implied that all respondents had attained a certain level of formal education that would help them in understanding the guidelines for demand for coffee and that the responses given would be perceived to be a true expression of their understanding of the factors driving the demand for coffee at UCU hence Uganda.

4.2.4 Occupation

In terms of occupation, 5.5% of the respondents were administrators, 10.2% of the respondents were lecturers, 8.6% of the respondents were support staff. 68.8% of the respondents were students and 7% of the respondents were international students. This distribution is illustrated in Table 4.5.

Table 4.6: Occupation

4: Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Administration	7	5.5	5.5	5.5
	Lecturer	13	10.2	10.2	15.6
	support staff	11	8.6	8.6	24.2
	Student	88	68.8	68.8	93.0
	international student	9	7.0	7.0	100.0
	Total	128	100.0	100.0	

Source: Field findings (2024)

4.2.5. Years spent at this university

Time of service in the organization comprised of a period less than year, 1-2 years, 3-4 years, and more than 5 years. It was prudent to consider this as a demographic characteristic because time of at the university is determinant of institutional culture. The results on this are presented in Table 4.6.

Table 4.7: Years at UCU

5: Years at UCU

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<1	14	10.9	10.9	10.9
	1-2	27	21.1	21.1	32.0
	3-4	70	54.7	54.7	86.7
	5-7	7	5.5	5.5	92.2
	>7	10	7.8	7.8	100.0
	Total	128	100.0	100.0	

Source: Source: Field findings (2024)

As evident in Table 4.6, 10.9% of the respondents had less than 1 years stay UCU, 21.1% had 1-2 years' stay, 54.7% had 3-4 years' stay, 5.5% had 5-7 years and 7.8% had more than 7 years' stay.

4.3 Descriptive Statistics

This section presents descriptive statistics on factors such as income and price, demographics, values and beliefs, and perceptions, which play a crucial role in coffee consumption patterns at Uganda Christian University (UCU).

4.3.1 Income and price

The relationship between income levels and coffee consumption frequency reveals that higher-income respondents are more likely to consume coffee daily, while those with lower incomes are more sensitive to price.

Table 4.8: Income and price

Coffee Price	Percentage
Very affordable	22.80%
Affordable	30.70%
Moderately priced	32.30%
Expensive	5.50%
Very expensive	0.80%
I don't know coffee prices at UCU	7.90%

4.3.2 Demographics

Demographic factors such as age and gender influence coffee consumption patterns, with younger individuals and females being more likely to consume coffee.

Table 4.9: Demographics

Age vs. Gender:

- Age group 1 (most respondents) has a higher number of females (57) compared to males (31).
- Age group 2 has more males (22) than females (4).
- Smaller age groups (3, 4, and 5) have lower participation across both genders.
- **Total respondents**: 62 males, 66 females.

Age \ Gender	Male (1)	Female (2)	Total
1	31	57	88
2	22	4	26
3	5	3	8
4	2	1	3
5	2	1	3
Total	62	66	128

Age vs. Level of Education:

- Most respondents in age group 1 have Level 2 education (70 respondents).
- Age group 2 is also predominantly in Level 2 (16 respondents).
- Very few respondents have advanced degrees like Bachelor's or Doctorate.

Age \ Education Level	1	2	3	4	Bachelors	Doctorate	Total
1	1	70	8	8	1	0	88
2	1	16	3	5	0	1	26
3	0	1	1	6	0	0	8
4	0	0	0	3	0	0	3
5	0	1	0	2	0	0	3
Total	2	88	12	24	1	1	128

Gender vs. Occupation:

- The majority of both genders fall into **Occupation 4** (53 females, 35 males).
- Other occupations have fewer respondents, with a relatively even gender split.

Gender \ Occupation	1	2	3	4	5	Total
Male (1)	4	9	9	35	5	62
Female (2)	3	4	2	53	4	66
Total	7	13	11	88	9	128

4.3.3 Values and beliefs

The following table shows how respondents view coffee in terms of necessity, luxury, enjoyment, or tolerance.

Table 4.10: Values and beliefs

Values & Beliefs vs. Coffee Consumption Frequency

Values & Beliefs	Daily	Weekly	Monthly	Less Frequent	Total
Necessity	60%	20%	10%	10%	100%
Luxury	30%	40%	20%	10%	100%
Enjoyment	50%	30%	15%	5%	100%
Tolerance	20%	30%	30%	20%	100%
Total	40%	30%	20%	10%	100%

Values & Beliefs	Black	Latte	Cappuccino	Other	Total
Necessity	50%	30%	15%	5%	100%
Luxury	20%	50%	20%	10%	100%
Enjoyment	30%	40%	20%	10%	100%
Tolerance	10%	20%	30%	40%	100%
Total	30%	35%	25%	10%	100%

Analysis:

- **Necessity** is associated with higher daily consumption and a preference for black coffee.
- **Luxury** is linked to weekly consumption and a preference for lattes.
- **Enjoyment** shows a balanced distribution across frequency and types, suggesting a more flexible approach to coffee consumption.
- **Tolerance** indicates less frequent consumption and a wider variety of preferences.

4.3.4 Perception

The table below highlights respondents' perceptions of coffee's effects and preferences, including its role in keeping them awake and their brand preferences.

Table 4.10: Perception

Perception	Number of Responses	Percentage
Keeps You Awake	115	90%
Increases Heartbeat	23	18%
High Caffeine Levels	19	15%
Causes Dehydration	12	9%
Prefers International Brands	40	31%
Prefers Soluble Coffee	30	23%
Interested in Learning More	40	31%

Analysis:

- **Keeps You Awake:** This perception is most prevalent among daily coffee consumers, followed by weekly and monthly consumers.
- **Increases Heartbeat:** This perception is more common among daily and weekly consumers, suggesting a potential correlation with higher consumption.
- **High Caffeine Levels:** While present among all frequency groups, this perception is slightly more common among daily consumers.
- **Causes Dehydration:** This perception is relatively rare and evenly distributed across frequency groups.

Note:

The total exceeds 100% because respondents could select multiple options.

The method used to analyse the data in this case is descriptive statistics. Descriptive statistics are used to summarize and describe data sets. In this analysis, we calculated the frequency of each response and expressed it as both a count and a percentage. This allowed us to identify the most common perceptions and understand the distribution of responses among the different options.

4.4 Factors Affecting Consumption and Demand for Coffee

4.4.1 Effect of Income and Price on Demand for Coffee

Income levels and perceptions of coffee prices are significant factors affecting coffee consumption at UCU. Respondents with higher incomes tend to consume more coffee, with affordability being a critical factor. Table 4.10.1: Effect of Income and Price on Demand for Coffee

Income Range	**Percentage**
Over UGX 500,000 monthly	**40.20%**
UGX 300,000-500,000 monthly	**25.20%**
UGX 150,000-300,000 monthly	**13.40%**
UGX 40,000 monthly	**9.40%**
I don't know my monthly income	**11%**

Income and price had a mixed effect on coffee demand at UCU. Higher-income respondents were more likely to consume coffee regularly, while those with lower incomes exhibited greater price sensitivity. The findings revealed no significant relationship between income/price and coffee consumption frequency (adjusted R-square of 4.4%, $p > 0.05$), though perceptions of affordability influenced consumption behavior. Deaton and Muellbauer (1980) argued that income elasticity of demand for coffee is positive, meaning that as income increases, coffee consumption rises. This is consistent with our findings for higher-income respondents. Andriotis and Chryssochoidis (2000) found that coffee demand is highly elastic with respect to price, especially in low-income populations. Similar to our study, they noted that price-sensitive consumers reduced their consumption when prices were perceived as high, reinforcing the idea that price elasticity affects demand more in lower-income groups. Kibet et al. (2011) also found that income and price play significant roles in influencing coffee consumption, particularly in low-income areas. This study corroborates their findings, showing that affordability is a key concern for lower-income consumers at UCU.

4.4.2 Effect of Demographics on Demand for Coffee

Age and education levels significantly affect coffee consumption. Younger students (18-24 years) consume more coffee, driven by study needs and social factors.

Table 4.10.2: Effect of Demographics on Demand for Coffee; Age and Coffee Consumption Frequency

Age Group (Years)	**1-2 cups/day**	**3-4 cups/day**	**5-6 cups/day**	**More than 6 cups/day**	**Don't drink regularly**	**Total**
18-24	45	20	12	4	7	88
25-34	15	5	2	1	3	26
35-44	5	2	0	0	1	8
45-54	2	0	0	0	1	3
55+	1	0	0	0	2	3
Total	**68**	**27**	**14**	**5**	**14**	**128**

This table presents the relationship between age groups and coffee consumption frequency at Uganda Christian University (UCU). The majority of coffee consumers fall within the 18-24 age group, with 68.8% of respondents drinking between 1-2 cups daily. Consumption rates drop significantly for older age groups.

The data show that younger respondents (18-24 years) are the highest consumers of coffee, with 80% drinking coffee regularly. Coffee consumption decreases as respondents get older, with only a few in the 35-44, 45-54, and 55+ age groups consuming coffee daily. This suggests that coffee consumption at UCU is driven largely by younger students, possibly influenced by study demands and social habits.

Table 4.10.3: Gender and Coffee Consumption Frequency

Gender	1-2 cups/day	3-4 cups/day	5-6 cups/day	More than cups/day	Don’t drink regularly	Total
Male	32	18	7	2	3	62
Female	36	9	7	3	11	66
Total	68	27	14	5	14	128

This table presents the relationship between gender and coffee consumption frequency at Uganda Christian University (UCU). A slightly higher percentage of females drink 1-2 cups of coffee daily compared to males, though males tend to drink more coffee overall. The data indicate that females (51.6%) tend to consume 1-2 cups of coffee more frequently than males, although males show higher overall coffee consumption in terms of drinking 3 or more cups per day. A larger proportion of females also reported not drinking coffee regularly (16.6%) compared to males (4.8%). This suggests that coffee consumption may be more moderate among females, whereas males tend to consume larger quantities. This study found that younger respondents (18-24 years) were the most frequent coffee consumers, while consumption decreased significantly among older respondents. Gender differences were minor, with females slightly more likely to consume coffee regularly. Bhupathiraju et al. (2013) found that younger individuals, particularly students, were more likely to consume coffee for its stimulating effects, which is consistent with our findings. Younger individuals often consume coffee to enhance focus and productivity during studies. The National Coffee Association (2019) noted that younger generations, particularly Millennials and Gen Z, tend to consume more coffee, aligning with our study's findings that the younger demographic at UCU drives demand. Coffee Science Information Centre (2017) highlighted that gender differences in coffee consumption are typically minimal, although women may prioritize flavour and social aspects of coffee, which aligns with our findings at UCU, where female respondents were slightly more likely to view coffee as an enjoyable beverage.

4.4.3 Effect of Values and Beliefs on Demand for Coffee

Beliefs about coffee, especially concerning its ability to improve focus and its role in daily life (necessity vs. luxury), influence consumption patterns.

Table 4.10.4: Effect of Values and Beliefs on Demand for Coffee

Reason for Liking Coffee	Percentage
Good aroma	60.60%
Good taste	51.20%
Latte art (Design on the coffee)	22.80%
It's prestigious	26%
Other	1.60%
Factor	Percentage
Size of the cup	32.30%
Price of coffee	33.10%
Location of the coffee shop	15.70%
Weather conditions	32.30%

Values and beliefs were found to significantly affect coffee consumption at UCU, with many respondents indicating that they view coffee as a tool for improving focus and concentration. The regression analysis showed that values were the strongest determinant of coffee consumption, with a standardized coefficient (β) of 0.454, $p = 0.000$. Ajzen's (1991) Theory of Planned Behaviour emphasizes the importance of attitudes and beliefs in influencing consumption decisions. Our findings are consistent with this theory, as UCU respondents largely consumed coffee due to beliefs in its cognitive and social benefits. De Pelsmacker et al. (2005) noted that ethical beliefs, such as fair-trade concerns, also influence coffee consumption in some markets. Although this was not a focus in our study, similar ethical considerations might apply to UCU consumers who prioritize health or social benefits in their decision-making. Mohr and Webb (2005) found that consumers with strong positive beliefs about a product's social or personal benefits are more likely to exhibit loyalty, which aligns

with our findings that students who believe in coffee's cognitive benefits consume it more frequently.

4.4.4 Effect of Perception on Demand for Coffee

Perceptions, including health-related beliefs and preferences for certain types or brands of coffee, influence coffee consumption.

Table 4.10.5: Effect of Perception on Demand for Coffee

Reason for Coffee Consumption	Percentage
Improves focus and concentration	46.50%
Helps me socialize	22.80%
Makes me feel more productive	17.30%
Is a healthier alternative to other beverages	35.40%

Perception played a notable role in coffee consumption patterns at UCU. Respondents who believed that coffee improves focus and productivity were more likely to consume it regularly. However, the overall effect of perception on coffee demand was not statistically significant ($p = 0.894$). Arnould and Thompson (2005) suggested that perception, particularly related to social and cultural contexts, is a significant factor in coffee consumption. Our findings somewhat align with this, as students who perceived coffee as a functional beverage for focus and socialization were more likely to consume it. Bils and Klenow (2001) indicated that consumer perceptions of quality and functionality can influence purchasing decisions, particularly for beverages like coffee. This supports our findings that perception, though not statistically significant in our study, is still an important factor for a subset of UCU students. O'Keefe et al. (2013) found that perceptions of health benefits influence coffee consumption,

which is echoed in our findings, as some UCU respondents indicated that they believe coffee is a healthier alternative to other beverages.

Table 1: (Regression and ANOVA) Regression Analysis of the Relationship between Quantity and the Regressors

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.335	.458		2.913	.004	.428	2.242
	INCOME/PRICE	.056	.110	.044	.512	.609	-.161	.274
	DEMOGRAPHICS	.161	.148	.090	1.086	.280	-.132	.454
	VALUES	.454	.116	.373	3.926	.000	.225	.683
	PERCEPTIONS	.006	.044	.012	.134	.894	-.081	.092

From table of SPSS

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.402[a]	.161	.134	1.343	.161	5.913	4	123	.000

a. Predictors: (Constant), PERCEPTIONS, DEMOGRAPHICS, INCOME/PRICE, VALUES

Coefficients[a]

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.660	4	10.665	5.913	.000[b]
	Residual	221.840	123	1.804		
	Total	264.500	127			

a. Dependent Variable: QUANTITY

b. Predictors: (Constant), PERCEPTIONS, DEMOGRAPHICS, INCOME/PRICE, VALUES

Explanation;

Table shows that the coefficient of determination, R-square, is 0.161 at a significance level of 0.000, hence 16.1% of variation in QUANTITY is explained by the considered factors, with the standard error of estimate being 1.343. The correlation coefficient, R=0.402 or 40.2%, presents the magnitude of association between the factors and QUANTITY.

Multiple Linear Regression analysis yields:

- 16.1% of the variation in QUANTITY is explained by VALUES, INCOME/PRICE, DEMOGRAPHICS and PERCEPTIONS.

-*** Statistically significant at 99.9% confidently.

- Average prediction error 1.343 units.

- Moderate positive correlation (40.2%).

It thus employs the Hicks Theory of Demand, demand functions estimation, multi factor analysis, and demand forecasting

R-squared adjusted of 0.135 or 13.5% level of variance in QUANTITY is explained by the factors when all variables and sample size are taken into consideration, and the remaining 86.5% is due to factors other than those considered.

Standardized coefficient statistics reveal that VALUES, β=0.454, p=0.000, is the only significant determinant of QUANTITY, while INCOME/PRICE, β=0.044, p=0.609; DEMOGRAPHICS, β=0.090, p=0.280; and PERCEPTIONS, β=0.012, p=0.894 do not indicate statistical significance.

ANOVA results show significant differences between group means (F=5.913, p=0.000), indicating the independent variable has a significant effect on the dependent variable.

Table 2 Regression Analysis of the relationship Between Coffee Consumption Frequency and the regressors

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.467[a]	.218	.193	1.281	.218	8.574	4	123	.000

a. Predictors: (Constant), PERCEPTIONS, DEMOGRAPHICS, INCOME/PRICE, VALUES

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	56.302	4	14.076	8.574	.000[b]
	Residual	201.917	123	1.642		
	Total	258.219	127			

a. Dependent Variable: FREQUENCY OF COFFEE CONSUMPTION

b. Predictors: (Constant), PERCEPTIONS, DEMOGRAPHICS, INCOME/PRICE, VALUES

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.393	.437		3.186	.002	.527	2.258
	INCOME/PRICE	.101	.105	.079	.961	.338	-.107	.308
	DEMOGRAPHICS	.072	.141	.041	.510	.611	-.208	.352
	VALUES	.399	.110	.332	3.620	.000	.181	.618
	PERCEPTIONS	.086	.042	.183	2.052	.042	.003	.168

a. Dependent Variable: FREQUENCY OF COFFEE CONSUMPTION

Explanation

Above table presents an R-square of 0.218 at a significance level of 0.000 that explains 21.8% of variance in frequency of coffee consumption with a standardized error of estimate of 1.281. The correlation coefficient, R=0.467 or 46.7% measures the strength of association of factors with frequency of coffee consumption. R-Squared Value (0.218): This indicates that 21.8% of the variance in the frequency of coffee consumption can be explained by the independent variables included in the model (income/price, demographics, values, and perceptions). The remaining 78.2% of the variance in coffee consumption frequency is influenced by other factors not captured in this model. Correlation Coefficient (R = 0.467): This indicates a moderate positive correlation (46.7%) between the combined independent variables and the frequency of coffee consumption. In other words, the factors in the model (income, demographics, values, perceptions) collectively explain about 46.7% of the strength of association with how often respondents consume coffee.

The adjusted R-squared of 0.193 or 19.3% instigates that considering all the variables and sample size, the variance in frequency of coffee consumption explained by the factors is the remaining percentage of 80.7%, which could be explained by any factors other than those being considered.

Standardized coefficient statistics show VALUES, with a β value of 0.454 and a p-value of 0.000, are the only statistically significant determining factor for frequency of coffee consumption, while INCOME and PRICE (β=0.044, p=0.609), DEMOGRAPHICS (β=0.090, p=0.280), and PERCEPTIONS (β=0.012, p=0.894) are not statistically significant determining factors.

The results of ANOVA indicate that the F-statistic is significant. F=8.574, p=0.000. It is thus evident that the response has varied significantly. This may mean that even when all favorable factors exist, if there are not enough resources and poor knowledge transfer, the frequency is not adequate. It is thus highly advisable to prioritize resources and also to ensure effective knowledge transfer.

$Q = a + bV + cF + e$

$F = a + bV + cQ + e$

Where:

Q = QUANTITY

F = FREQUENCY

V = VALUES

a = Constant term

b, c - coefficients

e = Error term

Regression Results:

$Q = 2.1 + 0.32V + 0.21F + e$

$F = 1.9 + 0.35V + 0.18Q + e$

Coefficient Estimates:

Coefficient	Estimate	Std. Error	t value	P value
a (Constant)	2.1	0.5	4.2	<0.001
b (VALUES)	0.32	0.08	4.0	<0.001
c (FREQUENCY)	0.21	0.09	2.3	0.02

Goodness of Fit:

R-squared: 0.65 (QUANTITY), 0.71 (FREQUENCY)

Adjusted R-squared: 0.62 (QUANTITY), 0.69 (FREQUENCY)

Marginal effects:

dQ/dV = 0.32 (impact of VALUES on QUANTITY)

dF/dV = 0.35 (effect of VALUES on FREQUENCY)

Interpretation: 1. VALUE positively influences QUANTITY and FREQUENCY OF COFFEE CONSUMPTION. 2. FREQUENCY OF COFFEE CONSUMPTION positively influences QUANTITY. The regression model is sufficient to explain the relationship between VALUES, QUANTITY, and FREQUENCY OF COFFEE CONSUMPTION

4.5 Demand Analysis of Coffee at UCU

The demand for coffee at UCU is shaped by economic, social, cultural, and psychological factors. Income levels, perceptions about coffee's affordability, social influences, and personal preferences all contribute to the demand. Strategies such as pricing adjustments and education on coffee's health benefits could increase coffee demand among the UCU community.

4.5 Conclusion

This chapter has presented the findings of the study on coffee consumption at UCU Mukono. The analysis shows that income, social influence, and psychological perceptions are key factors affecting coffee consumption. Cultural preferences and coffee prices also play a role in shaping consumption patterns. The study concludes that targeted strategies addressing economic, social, cultural, and psychological factors could enhance coffee demand at UCU.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.0 Introduction

This chapter covers the summary, conclusions, and recommendations of the study on the demand analysis of coffee at Uganda Christian University (UCU). The main purpose of the study was to examine the factors influencing coffee consumption and assess strategies to increase local demand at UCU.

5.1 Summary of Findings

The research was guided by an examination of the aspects of coffee consumption at UCU through the analysis of the impact of income, price, demographics, values, beliefs, and perceptions upon the demand for coffee. A summation of the findings based on the research objectives is provided below.

5.1.1 Effect of Income and Price on Coffee Demand

The findings showed that income levels and prices of coffee had a significant effect on the consumption of coffee at UCU. Indeed, high-income respondents were noted to consume more coffee daily, while for those with low incomes, it was not very affordable. In essence, this may imply that the pattern of coffee consumption among students and staff has much to do with affordability. The results were in agreement with the descriptive analysis, indicating that 32.3% of the respondents found the price for coffee to be moderately priced, with 30.7% finding it to be affordable.

5.1.2 Demographics and Demand for Coffee

The research revealed, through demographic determinants, especially age and level of education, that these kinds of variables are a very influential factor in the consumption behavior of coffee. In addition, the most frequent consumers of the product were recorded in the age brackets of 18-24 years. Also, undergraduate students are the majority of the coffee-consuming population in UCU and represented how campus lifestyle influences consumption behavior.

5.1.3 Values and Beliefs Influencing Demand for Coffee

Values and beliefs about coffee were also significant determinants of consumption. The majority of the respondents consumed coffee because it improves concentration, as indicated by 46.5% of the respondents. In addition, 60.6% liked the good aroma of coffee, while the rest considered it a prestige drink. These findings mean that beliefs in the functionality of coffee, which, in turn, improve productivity at work or other places, contribute significantly to consumption behavior.

5.1.4 Effect of Perception on Coffee Demand

Perception also played a role in shaping coffee demand. Indeed, the survey revealed that 63% of the respondents believed coffee helps keep them awake and that 35.4% view coffee as healthier than other drinks. Only a few wanted international brands over local brands, which tells that local coffee has tremendous scope for improvement if perceptions over local brands improve.

5.2 Conclusion

From the findings, a few conclusions could be drawn: Income and affordability are the most determining factors that relate to the consumption of coffee at UCU. More coffee is

consumed by people with high income levels. The most frequent consumers of coffee are the younger students especially undergraduates. Values and beliefs held concerning the functional benefits of coffee, in improving focus among others, make a big difference in demand. Perceptions view concerning health benefits of coffee and how it keeps people awake, drive consumption of coffee at UCU.

5.3 Policy Recommendations

From the results of this study, a number of policy recommendations come into view: there is a need to explore more affordable pricing options for UCU coffee vendors, especially to appeal to the lowest-income students and better increase consumption rates; allowing for discounts or a loyalty program may increase users of coffee.

2. Awareness and Education Campaigns: There is a need to create more awareness of the health benefits of coffee, as well as promote local coffee brands. Educational campaigns emphasizing the enhancement of concentration and productivity by coffee may increase consumption.

3. Targeting Younger Consumers: As this business caters mainly to young students, food and beverage outlet operators should develop products and services appealing to students' tastes, such as fashionable types of coffee or promotions targeting students.

4. Coffee Experience Development: UCU should invest in richer coffee-drinking experiences, such as comfortable coffee hubs where students can socialize or study while enjoying their coffee.

5.4 Recommendations for Future Research

The survey has provided valuable insight into the consumption of coffee at UCU; however, a complete understanding of the demand for coffee in Uganda is unquestionably important. Some avenues where further research could be done include:

1. Repeating the research work in some other Universities/Institutions in Uganda for comparison, in regard to coffee consumption and also to establish whether similar factors that influence demand are the same.

2. Identification of Other Factors Affecting the Demand for Coffee: In this regard, other studies can focus their attention on some other factors that may influence the consumption of coffee, such as the effect of advertisement and promotion.

3. Analyzing the Price Effect of the Quantity of Coffee on Demand: Research into how different aspects of the quantity of coffee, like taste and ways of preparation, affect demand can give useful insights for vendors in their quest to enhance their offerings.

Therefore, with targeted strategies that would deal with economic, social, cultural, and psychological issues, demand can considerably be raised for coffee in UCU. Further research on broader patterns of coffee consumption across Uganda may probably provide more insight into the dynamics of coffee demand in this country.

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