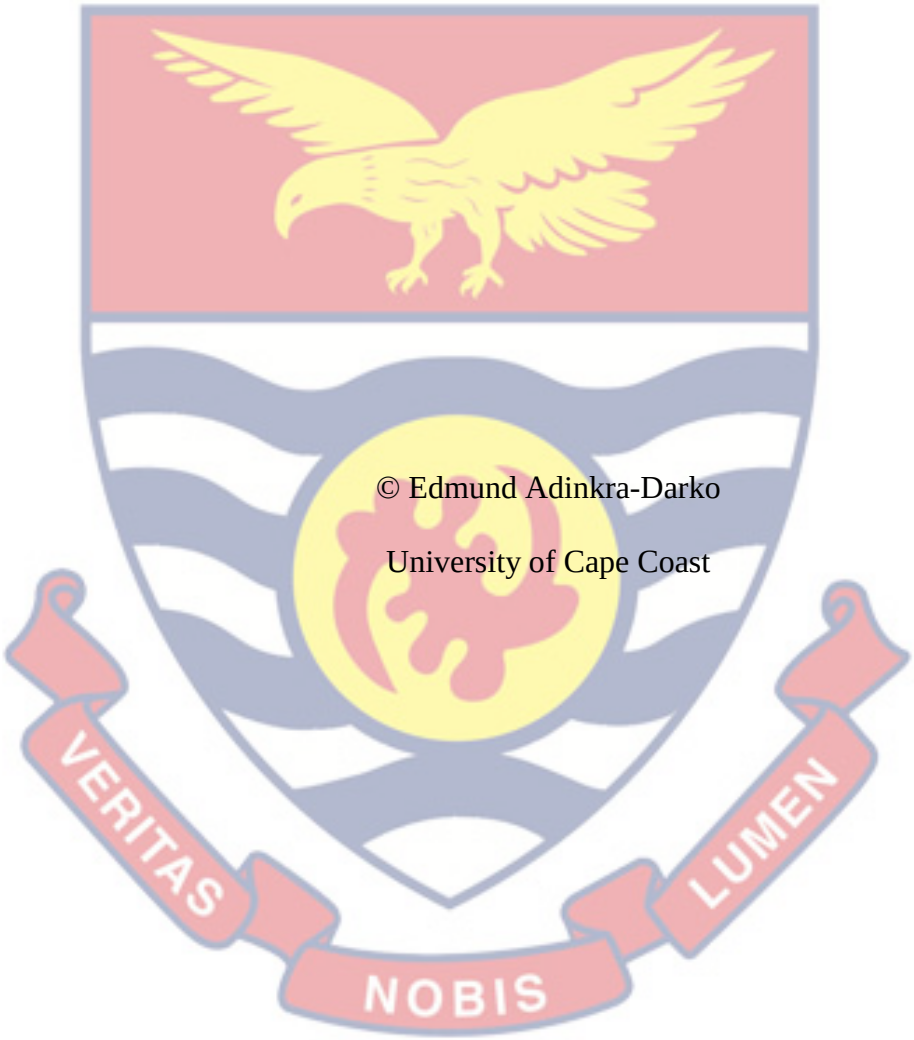
UNIVERSITY OF CAPE COAST

UNEMPLOYMENT DURATION, MIGRATION INTENTION, AND SOCIAL PARTICIPATION: EVIDENCE FROM SELECTED REGIONS IN GHANA

EDMUND ADINKRA DARKO

2022



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UNEMPLOYMENT DURATION, MIGRATION INTENTION, AND SOCIAL PARTICIPATION: EVIDENCE FROM SELECTED REGIONS IN GHANA

BY

EDMUND ADINKRA DARKO

Thesis submitted to the Department of Economic Studies of the School of Economics, College of Humanities and Legal Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Doctor of Philosophy degree in Economics

SEPTEMBER 2022

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature…… Date……

Name: Edmund Adinkra Darko

Supervisors' Declaration

We hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature…… Date……

Name: Professor Ferdinand M. Ahiakpor

Co-supervisor's Signature…… Date……

Name: Professor William Gabriel Brafu-Insaidoo

ABSTRACT

This study examines unemployment duration, migration intention, and social participation, with evidence from four administrative regions in Ghana. It employs primary data and semi-parametric Cox regression and probit models for the analyses. The study concludes that age, locality, social network, alternative income sources, migration status, and education are significant factors influencing unemployment duration in Ghana. Also, migration and education are jointly associated with shorter unemployment duration. The study further concludes that unemployment duration has an insignificant positive effect on intentions to migrate, but it significantly increases migration intentions for both sexes. Lastly, unemployment duration has a negative effect on social participation, particularly in rural areas. The study encourages young people to take up voluntary services and other forms of industry attachments to build labour market experience. Again, the government should develop and implement a policy on industrial attachment and internship programmes for tertiary students. Individuals should build and effectively utilise their social networks. Individuals who receive financial support while unemployed should leverage such income to intensify their job search efforts and activities. Moreover, individuals should take advantage of the opportunities created in the educational sector to upgrade their educational levels. The study further encourages job seekers with higher education to migrate as part of their job search efforts ad activities. Lastly, the government should take steps to build more economic and social infrastructure, especially in rural areas.

KEYWORDS

Ghana

Migration intention

Selected regions

Social participation

Unemployment duration

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DEDICATION

To Daniel Abina Dwaase and Capt. Justice Twumasi-Ankra (Rtd)

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LIST OF ACRONYMS

1D1F	One District One Factory
ACCA	Association of Chartered Certified Accountants
ACS	American Community Survey
AME	Average Marginal Effects
CIM	Chartered Institute of Marketing
CIMA	Chartered Institute of Management Accountants
EAs	Enumeration Areas
ERP	Economic Recovery Programme
EUS	Employment and Unemployment Survey
GDP	Gross Domestic Product
GEBSS	Graduate Business Support Scheme
GLSS	Ghana Living Standards Survey
GMM	Generalised Method of Moments
GSS	Ghana Statistical Service
GYEEDA	Ghana Youth Employment and Entrepreneurial Development Agency
HND	Higher National Diploma
ICAG	Institute of Chartered Accountants, Ghana
ILO	International Labour Organisation
IMF	International Monetary Fund
IOM	International Organisation for Migration
IT	Information Technology
LFS	Labour Force Survey
LPM	Linear Probability Model

MEA	Marginal Effects at Averages
MELR	Ministry of Employment and Labour Relations
MER	Marginal Effect at Representative Value
MLE	Maximum Likelihood Estimation
MoE	Ministry of Education
MoF	Ministry of Finance
NABCO	Nation Builders Corps
NDPC	National Development Planning Commission
NEIP	National Entrepreneurship and Innovation Programme
NYEP	National Youth Employment Programme
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
PCA	Principal Component Analysis
PHCs	Population and Housing Censuses
SAP	Structural Adjustment Programme
SDGs	Sustainable Development Goals
SHS	Senior High School
SPSS	Statistical Package for the Social Sciences
SSA	Sub-Saharan Africa
TVET	Technical and Vocational Education and Training
UCCIRB	University of Cape Coast Institutional Review Board
WESO	World Employment Social Outlook
YEA	Youth Employment Agency

CHAPTER ONE

INTRODUCTION

This thesis aims to examine unemployment duration, migration intention, and social participation in Ghana. This chapter presents the background to the study, the statement of the problem, the purpose of the study, research questions and hypotheses, significance of the study, delimitations, limitations, contribution, and organisation of the study.

Background to the Study

Unemployment, particularly among youth and graduates, has emerged as one of the most pressing socio-economic challenges in recent times (Ministry of Finance [MoF], 2017). Many nations continue to register high rates of labour underutilisation. This has resulted in oversized proportions of discouraged workers and expanding incidence of workers taking involuntary part-time jobs and employment. For many developing and emerging economies, growing poor-quality employment and working poverty present several challenges (International Labour Organisation [ILO], 2018). Productive employment is extremely scarce in the world of work despite the existence of the ILO's 1944 Declaration of Philadelphia, which emphasises full, productive employment and enhanced standards of living.

Sustainable development goal eight (SDG 8) stresses the need to promote inclusive and sustainable economic growth, full and productive employment, and decent work for all. However, much has not been achieved on this goal. The ILO reports that global employment growth dipped from an estimated average of 1.5 percent in the 1990s to less than 1 percent in 2018 (ILO, 2019). Quality employment is fast diminishing and the labour market

continues to witness substantial numbers of unemployed, own-account workers, and contributing-family workers in the midst of efforts against vulnerable employment (Otoo, Asafu-Adjaye, & Torgbe, 2015). In 2018, an estimated 45 percent and 61 percent of the global workforce were in vulnerable employment (own-account workers and contributing-family workers) and informal employment respectively; and more than a quarter (26%) of workers in low- and middle-income countries were poor (Figure 1).

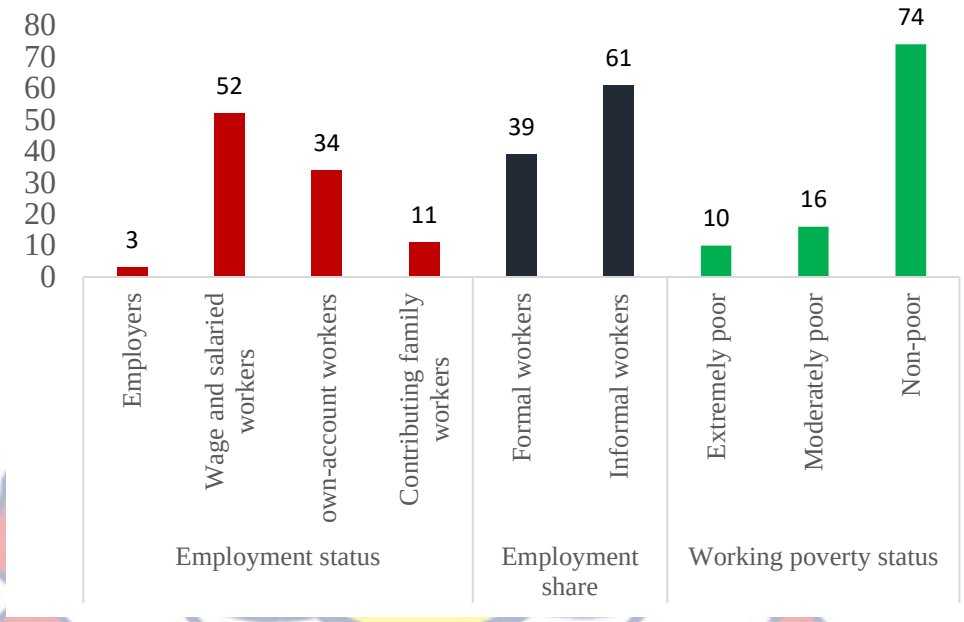

Figure 1: Global employment outcomes 2018
Note: the ILO defines moderately poor and extremely poor as the shares of workers living in households with income or consumption per capita between US$1.90 and US$3.20 per day, in purchasing power parity (PPP) terms, and less than US$1.90 per day (PPP) respectively.
Source: ILO (2019)

The Bretton Woods Institutions such as the World Bank and the International Monetary Fund (IMF) advocate that economic growth will create employment opportunities for many job seekers and new labour market entrants. This ideology has compelled many governments, policymakers, and economists toward the adoption of growth-stimulating policies, with the

assumption that economic growth will automatically engender decent jobs that will benefit every member of society (Otoo, 2018).

During the 1980s and 1990s, most developing countries particularly in Africa, including Ghana, embarked on an economic recovery programme (ERP) and structural adjustment programme (SAP) on the back of economic predicaments suffered by the economies. The motive behind such reforms was to sideline the government in direct economic activities while paving way for the private sector, described as the engine of growth and job creation, to thrive. The state was seen as a significant part of the economic problem that confronted the countries.

In Ghana, for instance, between 1973 and 1983, there was huge government debt, annual gross domestic product (GDP) growth was hovering around negative 0.5 percent on average and inflation rates were three digits (Chandavarkar, 1987). Specifically, in 1983, inflation in Ghana rose to 123 percent (Ghana-Vision 2020 Document). Therefore, rolling back the state became an important first step in addressing the problem. This necessitated the withdrawal of the state from direct economic activities to create an enabling environment for the private sector to operate (Otoo, 2018).

This resulted in the overnight and large-scale privatisation of several state-owned enterprises. Notable ones include the Bonsa Tyre Company Limited, Ghana Rubber Estate Company, and Aboso Glass Factory. As a result, the state lost its ownership and management of over 600 state-owned enterprises, making thousands of people jobless and unemployed (Biney, 2015). By the year 1990, over 90 thousand state employees had been laid off against privatisation. Between 1988/89 and 2000, the Ghanaian economy

consistently experienced growing adult unemployment from 0.8 percent to 10.1 percent.

The increasing adult unemployment was particularly caused by the retrenchment exercise carried out in both state-owned and private enterprises. Moreover, by 1990, the registered number of employees in the formal sector had edged down by half to 230,000 compared to 464,000 recorded in 1985 (Ghana-Vision 2020 Document). The public sector's contribution of an estimated 89 percent of about 230,000 formal sector job loss between 1985 and 1990, coupled with the prevailing low level of direct productive investments, has resulted in unhurried growth of the economy (Baah-Boateng, 2004).

Upon the implementation of the ERP and the SAP, growth has been realised mainly in the developing countries of Africa, and for that matter Ghana, but at the cost of (quality) employment over the years. For instance, in Sub-Sahara Africa, the annual average growth rate increased from an estimated 3.1 percent over the period 1970 to 1983 to 3.5 percent for the period 1984 to 2017. In Ghana, the annual average growth rate improved significantly from an estimated negative 0.004 percent to 5.5 percent over the same period (World Bank data, 2018).

Ghana had the rank of a middle-income country in 2007 based on its elevated per capita GDP, after the rebasing of national accounts in 2010 by the Ghana Statistical Service (Kwakye, 2012). This led to an increase in the economy's annual average growth to 8.5 percent between 2006 and 2011 from the 5.2 percent registered from 1984 to 2010 (Baah-Boateng, 2013). The Ghanaian economy recorded estimated real GDP growth of 14 percent on the

back of the country's commercial production of oil in 2011, positioning Ghana as one of the fastest growing economies worldwide in that year. In 2017, the economy's GDP grew at an estimated rate of 8.1 percent (MoF, 2018). These growth achievements have not meaningfully impacted the employment levels in Ghana.

The performance of the Ghanaian labour market since the implementation of the SAP and successor policies and programmes remains a major challenge to whatever was achieved during the period (Panford, 2001). The strong growth performance over the past three and half decades could reflect in the lives of the citizens through the creation of quality jobs. However, this has failed to happen over the years. The ILO reported that in 2008, the Ghanaian economy witnessed a decline in employment elasticity of growth from 0.64 during the 1990s to 0.4 between 2005 and 2008. In fact, this picture was not anything different from the situation in other African countries. Despite the recorded robust growth performance, employment creation remains a major challenge. The employment situation has been deteriorating, with unemployment trends assuming an upward trajectory.

The ILO estimated that, in 2017, global unemployment was over 190 million people compared to the unemployment level of 169.8 million people in 2007 (ILO, 2018; 2016). In Africa, an estimated 37.8 million people were unemployed. This represented an unemployment rate of 7.9 percent in 2017 and it was projected to heighten by 2.3 million in 2019 while the associated rate of unemployment stayed constant at 7.9 percent per year from 2017 to 2019 (ILO, 2018). The report further indicated that the size of unemployment in Sub-Sahara Africa was 29.1 million (7.2 percent) in 2017, and it was

projected to worsen to 30.2 million in 2018 and 31.3 million in 2019, with a corresponding unemployment rate of 7.2 percent and 7.3 percent respectively. Youth (15-24 years) constituted about 60 percent of the jobless population in Africa, with youth unemployment rates being more than double the national and adult rates (Ighobor, 2017).

The employment situation in Ghana is alarming. Unemployment and informal employment are high and growing, youth unemployment is beyond measure, and vulnerable employment has a lion's share of total employment. There is a continuous surge in poverty among the working class. In 2017, the unemployment rate in Ghana was estimated at 8.4 percent (GSS, 2019), which was higher than that of Africa (7.9%) and the world (5.6%). The registered 8.4 percent unemployment rate, though lower than the 11.9 percent recorded in 2015 (GSS, 2016), is considered high, given the current performance of the economy. Between 2006 and 2017, the national unemployment rate increased from 3.1 percent to 8.4 percent (Figure 2).

The situation is more threatening to the youth (15-24 years) than the adults. Between 2006 and 2017, the youth unemployment rate bloated from an estimated 6.6 percent in 2006 to 25.9 percent in 2015, but decreased to 18.5 percent in 2017. Moreover, from 2006 to 2017, the youth unemployment rates were more than double the national unemployment rates. In 2006, the youth unemployment rate was estimated at 6.6 percent relative to 3.1 percent registered for the entire country; in 2013, the rate was 10.9 percent against 5.2 percent for the nation; in 2015, it stood at 25.9 percent compared to 11.9 percent for the country; and in 2017, the rate was 18.5 percent relative to the national unemployment rate of 8.4 percent (Figure 2). An estimated 77 percent

of the Ghanaian youth have, at most, basic education, affecting their chances of employability (National Development Planning Commission [NDPC], 2019). The unemployment situation is expected to worsen, given the ravaging impacts of the COVID-19 pandemic on businesses and employment.

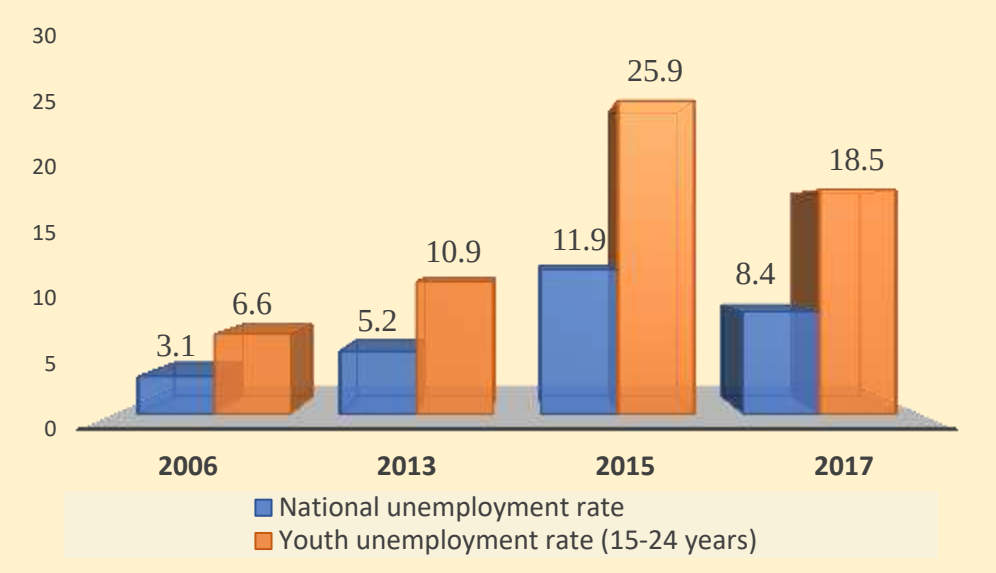

Figure 2: National and youth unemployment rates in Ghana (2006-2017)
Source: GSS (2008, 2014, 2016, 2019)

One characteristic of youth unemployment in Ghana is that it is higher among females (9.2%) than males (7.5%) due to the relatively low educational attainment. It is also predominantly an urban (11.4%) than rural (5.2%) phenomenon largely due to rural-urban migration (GSS, 2019).

Graduate unemployment is a major economic problem in recent times (MoF, 2017). In the past, the unemployment phenomenon was much associated with a lack of adequate education, but now, it is a major challenge facing graduates (Biney, 2015). It is quite worrying to experience high unemployment rates at a time the country is recording improvement in access to education at all levels.

The economy is not able to generate enough jobs to meet the demand mainly because of rapid population growth, youth bulge, unbridled trade liberalization, and high lending rates (Otoo, 2018; Panford, 2001). The industrial sector, especially manufacturing, which is principally associated with employment-intensive growth is struggling behind the service and agriculture sectors (Figure 3).

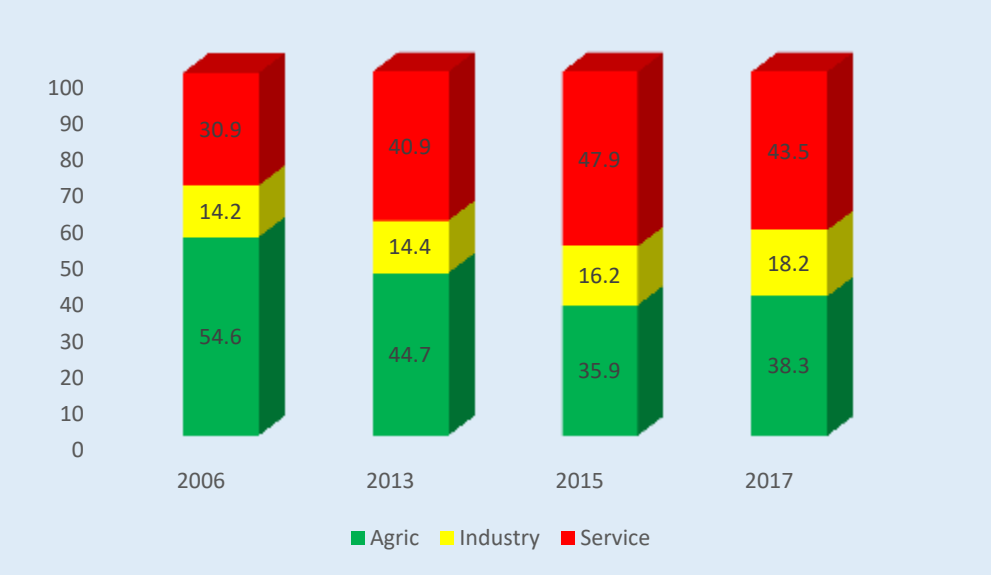

Figure 3: Employment share by industrial sector (2006-2017) percent
Source: GSS (2008, 2014, 2016, 2019)

The growth of the youth population is about three times higher than that of the entire population. It is estimated that about 300,000 youth enter the labour market annually seeking employment of various kinds, but only about two percent are able to secure formal jobs (LO/FTF, 2016). This is an indication of the willingness and desire of jobless and unemployed youth to work, the poor health of the economy, and the fast-deteriorating state of the employment situation in Ghana.

Since people cannot afford to remain unemployed and jobless in a society where social support system is absent for the unemployed, many

jobseekers have been compelled to join the informal economy where there are no regulations, rights at work, social dialogue, and social protection. The informal economy has become a haven for the jobless, unemployed, and other job seekers, largely the youth and women. This constitutes one of the reasons for the persistently high informal employment in Ghana. Available data suggest that out of every 10 Ghanaian workforces, more than seven (7) are engaged in informal enterprises and employment (Figure 4).

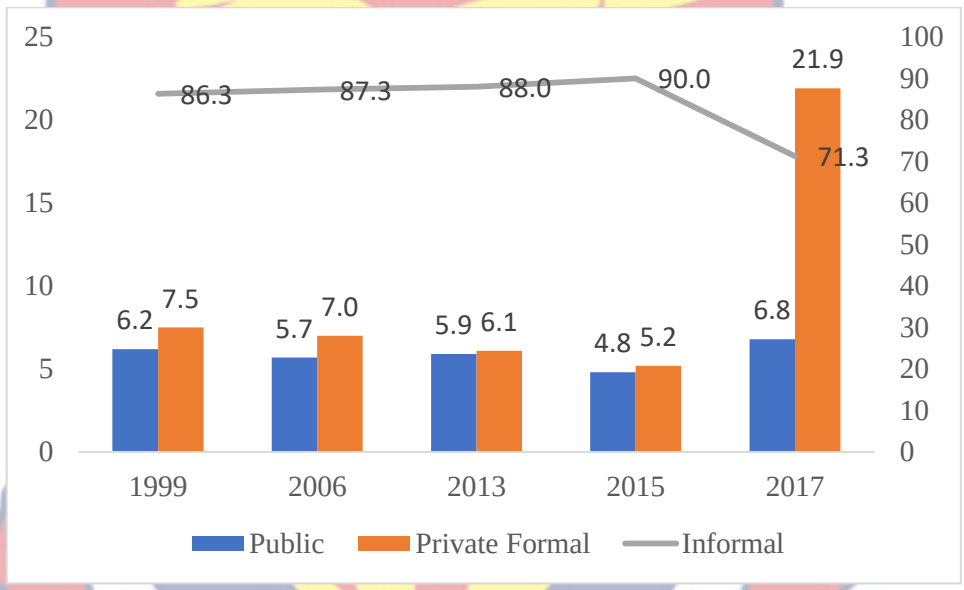

Figure 4: Employment share by institutional sector (2006-2017) percent
Source: GSS (2000, 2008, 2014, 2016, 2019)

The ILO 2018 World Employment Social Outlook (WESO) reported that in 2017, an estimated 66 percent of total employment in Sub-Sahara Africa was in informal or vulnerable employment. The report further described Sub-Saharan Africa as the region with the highest rate of informal employment worldwide (ILO, 2018). This makes the employment situation in Ghana more disturbing because the 66 percent described as the highest rate among the regions globally was about 5.3 percentage points lower than the rate (71.3%) recorded for Ghana in the same year.

The high levels of unemployment and informal employment have subjected many Ghanaians, particularly, the youth and women to economic hardship, migration, and various forms of social exclusion. In 2013, an estimated 24.2 percent of the Ghanaian population was classified as poor (Otoo et al., 2015). It is estimated that from 2013 to 2017, the number of poor people increased by nearly 400,000 (GSS, 2018).

Gainful employment enhances income level and social status, improves health stock and social networks, and promotes social participation in society (Garcy & Vågerö, 2012; Manhical, Östh & Rostila, 2015; Rostila, 2013). Social participation, in turn, provides people with opportunities to develop their self-concept, and friendships, among others (Kang, Palisano, Orlin, Chiarello, King, & Polansky, 2010). Thus, decent employment contributes to good health, resource accumulation, and better integration of individuals in society.

Unemployment, however, circumvents gains associated with decent employment and potentially makes its victims poor and dependent on others. The consequences of unemployment on the life of an individual are enormous. Joblessness and unemployment constitute major threats to all the benefits associated with employment. Prolonged unemployment has significant implications for the affected individuals, the society in which they live, and those responsible for designing and implementing labour market policies (Shumway, 1993).

Moreover, long unemployment duration subjects the victims to severe hardship and challenges in diverse forms including poverty, loss of self-esteem, depression, poor health status, delayed marriage, and increased

likelihood of divorce (Doiron & Mendolia, 2012; Kunze & Suppa, 2017). Usually, unemployed people tend to migrate with the hope of finding jobs. They commit suicide more than the employed (Blakely, Collings, & Atkinson, 2003). Unemployment frustrates and creates dissatisfaction among jobseekers and, in most cases, forces them into deviant acts like commercial sex, robbery, and political unrest (Baah-Boateng, 2013). It presents a threat to the peace and security of a country. The recent xenophobic attack and shop looting in South Africa are a manifestation of frustration and dissatisfaction among unemployed youth.

Unemployment induces migration aspiration and eventual migration among job seekers. The connection between unemployment and migration is gaining substantial interest in the labour market architecture as well as in policy design in recent times. Migration impacts the lives of individuals, families, groups, communities, and countries in varied forms. Individuals and families migrate mainly to seek better economic opportunities elsewhere, either temporarily or permanently (Bonifacio, 2013).

While many of the migrations are induced by economic prospects, others are driven by education, social well-being, and quality of life. However, some people also leave their places of origin due to ethnic conflicts, political contention, and even dramatic climatic variations (Afifi & Jäger, 2010; Behera, 2006). Some studies on the relationship between migration and unemployment emphasise there are mixed effects of migration on employment outcomes, depending on the locality, time, and existing institutional structures (Angrist & Kugler, 2003; Borjas, 1994; Fromentin, 2012; Jean & Jiménez, 2011).

In 2016, a projected 5,636 Ghanaians entered Italy by sea. Most of such irregular migrants usually find themselves in vulnerable situations (International Organisation for Migration [IOM] - Ghana, 2017; Ministry of Employment and Labour Relation [MELR], 2020). Thousands of youths and women lose their lives on the back of irregular migration annually. Available information indicates that between January and June 2021, over 2,000 migrants mainly from West African countries died in their attempts to enter Europe through Spain and by sea using inflatable boats (AfricaNews, 2021, July 7). The rising reports of Ghanaian migrants trapped in forced labour, hazardous work, and sexual exploitations in the Gulf states demonstrate the lack of adequate employment opportunities, frustration, and desperation among the unemployed and jobless youth and women in Ghana.

Unemployment makes the affected individuals, in some cases, feel inferior. This has implications for their engagements and interactions with others, and their willingness to support others in society, as well as the extent to which their views are considered in decision-making. The devastating impact of unemployment on individuals' subjective perception of social integration cannot be overemphasised, and the effect tends to heighten the longer the unemployment duration (Pohlan, 2018). Unemployment impedes the fulfillment of individuals' self-esteem and self-perception. Most people lose their social ties and sense of belonging due to prolonged unemployment. Unemployment adversely influences income, which eventually precludes individuals from meaningful engagements in economic, social, political, and cultural undertakings. It poses a threat to relationships and marriages since it

raises the probability of divorce or separation (Doiron & Mendolia, 2012). This becomes more critical with a longer duration of unemployment.

Statement of the Problem

One of the most critical socio-economic problems of our time is unemployment (MoF, 2017). Both unemployment and joblessness constitute a key socio-economic and political challenge in Ghana amidst the sound and resilient growth performance (Baah-Boateng, 2018a). Successive governments of Ghana have established key agencies and rolled out a few initiatives to address the employment challenge facing the country. These include the introduction of the one district one factory (1D1F), one village one dam, planting for food and jobs, rearing for food and jobs, digital marketing entrepreneurial programme, Nation Builders' Corp (NABCO), and National Entrepreneurship and Innovation Programme (NEIP) in 2018; establishment of Youth Employment Agency (YEA) in 2015; and Ghana Youth Employment and Entrepreneurial Development Agency (GYEEDA) in 2012; introduction of Graduate Business Support Scheme (GEBSS) in 2011; and National Youth Employment Programme (NYEP) in 20006. Despite these initiatives and interventions, the employment situation keeps deteriorating in terms of numbers and quality.

In 2017, Ghana's unemployment rate was estimated at 8.4 percent (GSS, 2019). The rate is about 5.3 percentage points higher, compared to the 3.1 percent recorded in 2006. The rate is higher than that of Africa (7.9 percent) and the world (5.6 percent) (ILO, 2018). Ghana's unemployment rate increased from an estimated 3.1 percent in 2006 to 5.2 percent in 2013, and 11.9 percent in 2015 but fell to 8.4 percent in 2017 (GSS, 2008; 2014; 2016;

2019). Youth unemployment in Ghana is much frightening. In 2017, about 18.5 percent of the economically active youth in the country were jobless and unemployed compared to the 6.6 percent recorded in 2006. Thus, within about 11 years, unemployment among Ghanaian youth worsened by an estimated 11.9 percentage points.

Moreover, informal employment has gained a highly unreasonable proportion of total employment. Currently, more than seven out of every ten (71.3%) workers in Ghana are engaged in informal employment and enterprises where productive work, legal and social protection, rights of workers, government support, and social dialogue are lacking.

The 2018 budget statement and economic policy of the Government of Ghana reported that only about 10 percent of graduates secure jobs after their first-year post-national service; and it takes up to 10 years for most of them to find employment for reasons including skills mismatch, unavailability of funding for entrepreneurship, attitudes of graduates towards job opportunities, and the low capacities of the industry to absorb the huge numbers (MoF, 2017). Also, the graduates constitute only a segment of the labour force. The adoption of the ERP and SAP has contributed to the employment challenge in Ghana (Otoo, 2018), due to the overnight privatisation of several state-owned enterprises and massive retrenchment in the public sector. The continuous deteriorating state of employment in the country has attracted several studies.

To better understand the employment challenge in Ghana, Otoo (2019) investigated the connection between informality and labour regulations in Ghana. The study established economic underdevelopment as the fundamental driver of informality as opposed to overregulation. In a background paper on

the youth unemployment and jobless challenge in Ghana, Baah-Boateng (2018b) argued that the expanding gap between economic growth and employment is a sign of sluggish job growth compared to output growth. Aryeetey and Baah-Boateng (2015) studied Ghana's growth success story and job creation challenges. Their findings revealed a weak employment response to growth due to slow growth in high-labour absorption sectors of the economy such as agriculture and manufacturing relative to high growth in low-employment generating sectors including mining and oil extraction.

Baah-Boateng (2015) investigated the unemployment situation in Ghana using cross-sectional analysis from demand and supply perspectives. The study found unemployment to be an increasing function of reservation wage but decreases with age. Moreover, studying determinants of unemployment in Ghana, Baah-Boateng (2013) maintained that Ghana's unemployment situation is more of a demand-side effect than a supply-side due to the weak employment creation effect of output. The categories of persons considered vulnerable to unemployment by the study are the youth and urban residents, with education and sex acting as moderating factors.

A different dimension of the unemployment situation in the Ghanaian economy was studied by Biney (2015), focusing on graduate unemployment. The result showed that the situation is changing. Previously, unemployment was much associated with a lack of adequate education, but now, it is a major challenge facing graduates. In a similar study on the magnitude and impact of youth unemployment in Ghana, Poku-Boansi and Afrane (2011) posited that, generally, jobless and unemployed people are compelled to identify alternative sources of livelihood. Therefore, they end up engaging in survival-type

activities in the informal sector and, sometimes, in unlawful practices like robbery and prostitution. The study, further, attributed the growing urban-youth unemployment to heightening levels of (rural-urban) migration.

Despite the numerous studies on the unemployment situation in Ghana, none of them considered the duration aspect of unemployment. Meanwhile, ignoring unemployment duration and focusing on just its level, rate, determinants, and/or impacts presents a distorted picture of the complexity and the reality of the unemployment situation (Sayre & Daoud, 2010). This is the situation in Ghana. It is easy to tell the level, rate, determinants, and impacts of unemployment but nothing could be said about the length of time it takes an unemployed individual to leave the unemployment spell in the Ghanaian economy. Unemployment duration is key from the perspectives of atrophy of skills, welfare, and threat to social inclusion. Longer unemployment duration is considered a major problem in a society because it increases the risk of social exclusion among its victims (Muilu, Rusanen, Naukkarinen & Colpaert, 2019).

This suggests that without the duration component, the unemployment situation in the country has not been fully explored and understood. Hence, this study seeks to expand the studies on unemployment in Ghana to include the duration aspect. This is the knowledge gap this study intends to fill. Moreover, some authors (e.g. Danacica, 2012; Haynes, Higginson, Probert & Boreham, 2011; Kherfi, 2015; Kisto, 2014; Kong & Jiang, 2011; Marek, Damm & Su, 2016; Rahman, Khan & Jamal, 2019) studied determinants of unemployment duration in different countries but failed to consider the joint effect of educational attainment and migration status. This study focuses on

individual-specific determinants of unemployment duration with emphasis on the joint effect of migration status and educational attainment. The outcome of this study would help the government and policymakers to identify the category of persons as well as the social interventions and support systems that should be targeted. Moreover, unemployed individuals and new labour market entrants would appreciate how their traits could influence the employment situation, migration aspirations, and social participation.

Purpose of the Study

Generally, the purpose of this study is to examine unemployment duration, migration intention, and social participation using data from four administrative regions of Ghana. Specifically, the study aims to:

1. Determine individual-specific factors that influence unemployment duration in Ghana, with emphasis on the joint effect of migration status and educational attainment.
2. Examine the effect of unemployment duration on an individual's migration intention.
3. Investigate the effect of unemployment duration on social participation.

Research Questions

1. What individual-specific factors influence unemployment duration in Ghana?
2. How do migration status and educational attainment jointly influence unemployment duration?
3. What is the effect of unemployment duration on an individual's migration intention?

4. What is the effect of unemployment duration on social participation?

Research Hypotheses

The study tests the following hypotheses:

H_o: Migration status and educational attainment do not jointly influence unemployment duration.

H_1: Migration status and educational attainment jointly influence unemployment duration.

H_o: Unemployment duration does not influence an individual's migration intention.

H_1: Unemployment duration influences migration intention.

H_0: Unemployment duration does not affect social participation.

H_1: Unemployment duration affects social participation.

Significance of the Study

The growing unemployment is increasingly eroding the quality of life and the future of many Ghanaians, particularly the youth. The large pool of labour force trapped in unemployment constitutes an underutilisation of resources and a major challenge to the country's growth and development. High levels of unemployment might not be an issue if it takes unemployed persons a short time to transit from unemployment to employment. When this happens, the unemployment situation can be described as a transitory rather than a chronic problem for the growing labour force. However, if it takes the unemployed individuals a longer period to exit the unemployment spells, then, unemployment becomes a destination for its victims.

The outcome of the study would help build on the literature on Ghana's unemployment challenge. One major contribution of this study is that

it would provide an estimate of unemployment duration in Ghana, something that all the existing studies have neglected. The outcome of the study would help the government and policymakers to clarify whether unemployment in Ghana is a transitory or a chronic problem for job seekers, which in turn would reveal the gravity of the unemployment situation in the country. Moreover, the study would help job seekers and new labour market entrants to identify the potential individual-specific factors affecting unemployment duration for them to act accordingly.

Migration is gaining dominance in the global labour market discourse, and Ghana is no exception. The study would establish the effect of unemployment duration on individuals' intention to migrate as well as social participation. More importantly, the study would inform government and policymakers on the type(s) of social intervention programmes and support systems that should be carried out to mitigate the threatening effects of unemployment in the country. The study would further help the government and policymakers to identify the category of persons as well as the social interventions and support systems that should be targeted. Lastly, the outcome of this study would initiate a new dimension of discussions on the unemployment situation in Ghana among policymakers, researchers, and social commentators.

Delimitation

This study focuses on unemployment duration, migration intention, and social participation in Ghana. It, specifically, employs 836 economically active individuals (respondents) from eight (8) districts in the Brong Ahafo, Central, Greater Accra, and Upper East Regions. Data from these areas allow

the study to address its objectives: to determine individual-specific factors that influence the duration of unemployment in Ghana, having in mind the joint effect of migration status and educational attainment; to examine the effect of unemployment duration on migration intention; and to investigate the effect of unemployment duration on social participation.

Limitations

This thesis examines individual-specific factors that influence unemployment duration, as well as the effect of unemployment duration on migration intention and social participation in Ghana. Like many other studies, the methods of the study, including the research design, data, estimation techniques as well as the conceptualisation, are not without limitations. Potential limitations identified in this study are presented in this section.

A study of this nature would ideally require the use of data with nationwide coverage but this thesis employed data from four selected regions out of 10 (now 16) regions. Again, survival analysis is best done with longitudinal data so that the study participants can be followed over time to determine their survival times and hazard rates but this study utilises cross-sectional data. The study also considers migration decisions as individuals' voluntary decisions rather than household choices, and something that could be forced such as during wartime and/or political refugees. Moreover, since individuals are mostly not willing to provide information on their earnings and incomes, the study employs the average monthly expenditure of the respondents as a proxy for monthly income to analyse the effect of income on social participation instead of information on actual income.

These limitations, however, have less impact on the outcome and robustness of the study in the sense that several studies (Ahiakpor, 2012; Barrera-Osorioa & Bayona-Rodríguez, 2019; Kong & Jiang, 2011; Lyu et al., 2019) have utilised data from few regions, provinces or institutions but produced robust results, conclusions, and generalisations. Again, several authors and scholars (e.g., Dănăcică, 2015; Kisto, 2014; Rahman, Khan & Jamal, 2019) have done survival analysis using cross-sectional data and obtained efficient and consistent results. Similarly, expenditure has been used as a proxy for income with time-tested findings in different studies. These limitations also offer important grounds for further studies in this area.

Contribution of the Study

The contributions of this study to the knowledge on unemployment in Ghana and studies on unemployment duration, in general, are twofold: first, the study determines individual-specific factors that influence unemployment duration, with special attention on the joint effect of migration status and educational attainment on unemployment duration; and second, the study further examines the effects of unemployment duration on migration intention and social participation.

Generally, the findings and the conclusions of this study broaden the knowledge and understanding of the unemployment situation in Ghana by incorporating the duration aspect of unemployment. The study establishes that age, locality, levels of education, migration, and social networks are significant individual-specific traits that influence the duration of unemployment. Also, the study argues that migration and education are jointly associated with shorter unemployment duration. Moreover, the study identifies

a positive of unemployment duration on migration aspirations of both males and females. Finally, the study asserts that unemployment duration reduces social participation, particularly in rural areas.

Organisation of the Study

The study is organised into eight chapters. Chapter One is the introduction. It comprises the background to the study, statement of the problem, the purpose of the study, research question and hypotheses, significance of the study, delimitation, limitations, contributions, and lastly, organisation of the study. Chapter Two is devoted to the review of theoretical and empirical literature relevant to the study. Chapter Three looks at the research methods employed for the study. Chapter Four presents the socio-demographic characteristics of the respondents and the descriptive statistics of the variables used. Chapters Five, Six, and Seven provide the results and discussions. The last chapter, Chapter Eight, highlights the summary, conclusions, and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The study examines unemployment duration, migration intention, and social participation in Ghana. This chapter is devoted to the review of relevant literature in this area. The review covers theoretical and empirical literature and ends with a chapter summary. In terms of theories, the job search theory, human capital model, neoclassical theory of migration, and empowerment in participation theory are reviewed. With the empirical literature review, attention is focused on covariates of unemployment and unemployment duration, factors that influence migration intention, and determinants of social participation.

Theoretical Literature Review

This section of the literature review, as indicated earlier, focuses on the review of theories underpinning the study. These include the job search theory, human capital model, neoclassical theory of migration, and empowerment in participation theory.

Job Search Theory

The job search theory began in the early 1960s with the work of Stigler (1962) in his paper "Information in the Labour Market". In this article, Stigler offered a model that sought to examine how an unemployed person might approach the job search in a labour market in which enterprises provided a wide range of employment offers. The model was premised on the assumption that unemployed persons were aware of the existence of many and varied job opportunities at different wage levels and that they could identify an enterprise

that would offer a higher wage by contacting the different enterprises at some cost. Stigler speculated that the optimum search approach would be to contact a specified number of enterprises and accept the best wage among the available wage offers. Thus, the unemployed person would contact an enterprise at a time and end the search once they received a wage offer equal to or higher than their reservation/predetermined wage (the lowest wage a job seeker is willing to accept for a given job offer).

Since every new job search creates diminishing returns in the expected wage, the ideal number of enterprises to contact would be determined by equating the expected marginal gain with the marginal cost of contacting an enterprise. Therefore, when receiving a job offer, the job seeker could estimate the expected gain from further search and relate it to the cost of contacting other enterprises. If the available wage offer is lower than their reservation wage, then the expected gain would be higher than the cost, and the job search would continue (Stigler, 1962).

Mortensen (1986) and Lancaster (1990) independently developed models of job search theory in line with that of Stigler (1962) to enhance understanding of how unemployment may arise. These models basically assume that for an individual who is declared unemployed in the labour market, the expected spell of unemployment duration is affected by two conditions: the probability of getting a job opportunity and the probability of not letting go of the offer but accepting it.

Since human beings, by nature, are heterogeneous, the two probabilities could be influenced by the personal traits of the job seeker. The probability of getting a job offer in the labour market could depend on

personal attributes such as educational attainment, years of labour market experience, gender, and/or age which render the unemployed person attractive to the firm. The probability of accepting the available job offer by a job seeker, on the contrary, is affected by his reservation wage, which is practically influenced by factors including the search cost, age, labour market experience, locality, expected distribution of wage offers, and the existence, size, and length of unemployment benefit.

In summary, with the job search models as developed by Stigler (1962), Mortensen (1986), and Lancaster (1990), unemployment would occur when unemployed persons do not accept available wage offers that were less than their predetermined wages. The practical implication of these models suggests that unemployed persons with substantially high reservation wages might experience longer unemployment duration compared to their counterparts with relatively low reservation wages, all other things being equal.

Nonetheless, the job search theory has been criticised on two counts. One, Rothschild (1978) criticised it on the grounds that it was incomplete since the theory analysed only the optimizing behaviour of job seekers, which is essentially one side of the labour market, without interrogating why employers would offer wages different from the equilibrium wage. The other criticism came from Diamond (1972), who argued for systematic modeling of the behaviour of profit optimising employers in the labour market as there is for job seekers. He asserted that assuming all unemployed persons or job seekers were to do an optimal job search, then, all employers would eventually offer the same wage which would equal the monopsony wage. This is the

genesis of the *Diamond Paradox*, which implies that optimal search by job seekers would destroy the need for job search. He concluded that employers' wage-fixing power, along with unemployed persons' optimal job search behaviour, would eradicate any motivation that the employers have to offer varied wages.

Notwithstanding the criticisms leveled against the job search model (Lancaster, 1990; Mortensen, 1986; Stigler, 1962), it remains a valuable theory when one's desire is to examine the effects of individual-specific traits such as sex, age, reservation wage, education, migration status, locality and marital status on unemployment duration, which is one of the objectives of this study.

Human Capital Theory

The human capital concept could be linked to the emergence of classical economics in the mid-1770s and the ensuing development of a scientific theory (Fitzimons, 1999). Human capital comprises any stock of energies, knowledge, skills, habits, and characteristics that enhance workers' productivity and ultimately contribute positively to making them industrially efficient (Kenny, 2019). According to Schultz (1961), human capital is one of the essential resources that aid the growth of the modern economy. Becker (1964) established that human capital is valuable in the production process because it raises the productivity of a worker in all tasks but with some degree of variation across tasks, industries, and situations.

With the onset of human capital as an academic discipline, some scholarly writers and researchers, in particular, extensively interrogated the medium through which human capital could promote socio-political

development and freedom (Grubb & Marvin, 2004; Sen, 1999). The human capital concept can be grouped into different categories based on the varied perspectives of academic disciplines. The first argument emphasises the individual aspects. Schultz (1961) acknowledged human capital as "something akin to property" against the concept of the labour force in the classical paradigm and further conceptualised that the productive capacity of human beings is much larger than all other forms of wealth combined. Some studies (Garavan, Morley, Gunnigle & Collins, 2001; Youndt, Subramaniam & Snell, 2004) have established that human capital could be closely associated with education, knowledge, skills, and abilities. Rastogi (2002) conceptualized human capital as the knowledge, competency, attitude, and behaviour of an individual.

Another argument is about human capital itself and the process of its accumulation. This perspective stresses the knowledge and skills developed through educational undertakings like compulsory basic education, post-secondary education, and vocational education (Alan, Altman & Roussel, 2008). Although this view broadens the human capital concept, it fails to recognise the fact that individuals could equally acquire knowledge and skills through life learning.

The third proposition is in line with the production-oriented argument of human capital. Romer (1990) considered human capital as an essential source of economic productivity. Also, human capital can be thought of as a combination of factors such as education, experience, training, intelligence, energy, work habit, trustworthiness, and initiative that influence the value of a person's marginal productivity (Frank & Bernanke, 2007). Within the context

of the production-oriented standpoint, human capital is considered as the stock of knowledge and skills embodied in the ability to perform to produce economic value (Sheffrin, 2003). Moreover, Rodriguez and Loomis (2007) explained human capital as the individual-specific traits such as knowledge, skills, competencies, and attributes that ease the creation of personal and socio-economic well-being from a social perspective.

Human capital comprises both the instrumental concept to produce a certain (economic and social) value and the endogenous means to self-generate it. It, therefore, has the following features: it is accumulated slowly over time, it is an investment that yields economic returns, and it can depreciate due to new knowledge or technical progress. Given that experience can be recognised as a category of knowledge, human capital becomes synonymous with the knowledge embedded in an individual.

Good human capital enhances labour market outcomes for workers in terms of, for example, employability and earnings. Workers with specific education and training have limited motivation to exit a company and companies also have less incentive to sack them than workers with little or no education and training (Becker, 1964). The implication is that quit and dismissal rates are negatively related to the level of education and training. Moreover, a person's success in the labour market is influenced by investments in human capital including education, training, and work experience (Becker, 1974; Shumway, 1993). Thus, highly developed human capital enhances employability, reduces unemployment, and shortens the length of unemployment spells among job seekers, all other things held constant.

Neoclassical Theory of Migration

The neoclassical theory of migration is the initial theoretical model put forward to aid the understanding of labour migration at both macro and micro levels. It assumes that migration is influenced by variations in returns to labour across societies and markets. The basic framework of the neoclassical theory emphasises that in the economic development process, migration is the product of actual wage gaps across countries, societies, and markets due to varying degrees of labour market rigidities (Harris & Todaro, 1970; Hicks, 1932; Lewis, 1954). The theory also considers migration as the outcome of geographical disparities between labour demand and labour supply which exist at various levels (De Haas, 2010; Kurekova, 2011). The resultant wage disparities drive workers to migrate to scarce labour and high-wage societies from excess labour and low-wage societies. Therefore, migration helps to redistribute labour, employment opportunities, and earnings across societies and markets, which is contrary to the movement of capital between markets.

In a full employment situation, the neoclassical theory of migration forecasts an existence of a linear association between wage variations and migration (Bauer & Zimmerman, 1999; Borjas, 2008; Kurekova, 2011). In an advanced neoclassical analysis of migration, the intention to migrate is influenced largely by predicted rather than actual earnings, where the earnings are weighted by the likelihood to secure a job (Massey, Arango, Hugo, Kouaouci, Pellegrino & Taylor, 1993).

Closely related to the neoclassical theory of migration at the micro-level framework of analysis is the human capital theory of migration (Todaro, 1969). The human capital theory of migration, developed by Sjaadstad (1962),

enhances the neoclassical model by bringing on board individual socio-demographic attributes such as age, gender, education, experience, skills, and abilities as essential covariates of migration (De Haas, 2010; Bauer & Zimmerman, 1999; Kurekova, 2011). The implication, therefore, is that in the human capital theory of migration, factors including age, education, skills, experience, employment status, preferences, and expectations significantly influence intentions to migrate. The chance of a person to migrate generally increases with the level of education but diminishes with age (Bauer & Zimmerman, 1999). The theory also posits that, all other things remaining constant, migrants tend to be fairly high-skilled since migration enhances their probabilities of accomplishment including employment, hence shorter unemployment duration.

Like many theories, the neoclassical theory of migration has been criticised contextually (Arango, 2000) and on empirical grounds (Massey et al., 1998). The theory has been considered as instinctively limiting migration determinants, downplaying market imperfections, standardising migrants, and migrant communities and, in particular, being a-historical and not dynamic. Moreover, the neoclassical theory of migration fundamentally neglects the effects of origin and destination markets. It is silent on politics and policies, which are only regarded as distortion factors. It also presents an excessively optimistic interpretation of migration, which is not always a voluntary course to enhance gains. The theory has also been criticised on the basis that it assumes individuals, rather than households and communities, make their cost-benefit analyses (Hochleithner & Exner, 2018). Again, a direct

relationship between wage variations and migration flow has been found in Europe by Massey et al. (1998), employing different theoretical propositions.

In the midst of the aforementioned drawbacks of the neoclassical theory of migration, it constitutes a fundamental theory in identifying drivers of migration. It assumes that migration is basically motivated by a thoughtful analysis of financial costs and benefits as well as psychological dimensions (Todaro & Smith, 2006). The theory is considered a treasured tool for analysing the causes and effects of migration and it is well-positioned in recent social, policy, and academic-related studies (Kurekova, 2011). In terms of this study, the neoclassical and the human capital theories of migration are utilised because of their micro-level orientations. These theories allow the study to examine individuals' socio-demographic traits such as unemployment duration, expected wages, and returns on human capital on migration intention in Ghana.

Empowerment in Participation Theory

The empowerment in participation theory emphasises the connection between empowerment and participation. The theory posits that empowerment emanates from participation in thinking, decision-making process, planning, acting, monitoring, and evaluating (White, 1981). Recognition of the relevance of participation was born out of the acknowledgment that the poor in the society has been fundamentally hurt due to development and that every member of the society needs to be engaged in development decisions, implementation, and benefits. Participation is, generally, recognised as an integral tool of empowerment. Effective participation allows collective action including a decision-making process, while empowerment promotes sharing

control, entitlement and capacity to participate, and the ability to exercise influence in decision making.

Agrawal and Gibson (1999) highlighted the drawback of the state in top-down resource conservation practices and emphasised social participation as the solution to the limitation. Mompati and Prinsen (2000) identified the individual as an agent who can make contributions to decision-making processes. This paradigm embodies a move towards people-centered development at a normative level (Chambers, 1993; Kelly, 2001).

Empowerment is a process through which persons or organised groups collectively develop their capacity to gain or increase their power and autonomy to accomplish their set goals and targets. It can also be thought of as a means of building a sense of autonomy and self-confidence, acting independently and collectively to modify the existing power relationships and the institutions that preclude the less advantaged people in society and make them poor (Eyben, 2011). It emphasises the need to provide the necessary support to the disadvantaged people in society to obtain power and influence those who have control over access to productive resources (Combaz & Mcloughlin, 2014).

This can be achieved through enhanced access to essential resources, the provision of robust social protection, health and educational systems, and the creation of more decent jobs. Social participation is an organised system and process through which persons are characterised by specific, collective, conscious and voluntary actions, which eventually generate self-fulfillment, attainment of goals, and realisation of dreams (Moradi, Mousavi & Arshi,

2013). It is considered as one of the basic needs of all persons regardless of age, sex, locality, ethnicity, and educational level among others.

In the view of Holcombe (1995), empowerment and participation are intimately associated to the extent that they complement each other to offer a better meaning, understanding, and purpose. The absence of meaningful empowerment reduces social participation to an idea or an avenue to preserving a given power relation status quo while the lack of effective participation renders empowerment an empty, unsatisfied, or unfulfilled promise (Cornwall & Brock, 2005). Meaningful participation and effective empowerment play complementary roles and are, thus, regarded as both means and ends or processes and outcomes (Pettit, 2012). Holcombe (1995) further asserted that the empowerment process is multidimensional, requiring meaningful changes in the social, political and economic structures, and conditions that engender social exclusion and poverty in society.

In this study, attention is focused on the socio-economic dimension of empowerment since it seeks to examine the effect of unemployment duration on social participation.

Empirical Review

This section of the chapter reviews related empirical studies. Specifically, this review considers studies on the employment situation in Ghana, covariates of unemployment duration, and factors that influence migration intention, as well as social participation. The rationale is to be abreast with the existing studies on the topic under study. It helps to identify the gap(s) in the existing studies, thereby avoiding duplication of studies.

Recent Studies on Employment and Unemployment Situation in Ghana

Otoo (2019) examined the connection between informality and labour regulations in Ghana. He employed binomial logistic regression and Ghana Living Standards Survey (GLSS) data from 1999 to 2013. The study found economic under-development as the key driver of informality and the high informal employment in Ghana. In a background paper on youth unemployment and jobless challenge in Ghana, Baah-Boateng (2018a) argued that the expanding gap between economic growth and employment is a sign of sluggish job growth compared to output growth. Baah-Boateng (2016) investigated the drivers of Africa's youth unemployment. The study analysed the central sources of unemployment using panel data from 41 African countries between 2000 and 2010. The panel regressions estimation technique based on the random effect approach was employed in analysing the data. The study found that the main drivers of unemployment in Africa are poor economic growth from the supply and demand sides, and the demographic youth bulge. The results also indicated that females have higher youth employment rates compared to males as well as urban areas relative to rural areas. However, the study did not find any link between youth unemployment and education.

Baah-Boateng (2015) sought to examine the factors that influence unemployment in Ghana from both labour demand and supply sides. Two different household datasets of 2008 and 2013 were used to evaluate the unemployment effects of labour demand and labour supply. The study adopted the logistics regression models to analyse the effects of labour demand and labour supply variables on unemployment. The results of the study indicated

that education and reservation increase unemployment while age decreases unemployment. The positive correlation between unemployment and education suggests the existence of a skills mismatch between the skills being imparted by the academic and training institutions and those required by employers. The study also showed that there is a strong influence of labour demand factors on unemployment because of the relatively higher unemployment full-time job seekers face compared to part-time and self-employment seekers. The study, further, indicated that sex, poverty status, marital status and location influence unemployment.

Aryeetey and Baah-Boateng (2015) revealed that there is feeble employment elasticity to growth due to slow growth in high-labour absorption sectors of the economy such as agriculture and manufacturing relative to the high growth in low-employment generating sectors including oil extraction and mining.

Moreover, studying determinants of unemployment in Ghana, Baah-Boateng (2013) employed a probit model and data from three different rounds of GLSS over the period 1991/1992 to 2005/2006. The study provided evidence that suggests that few sectors creating employment is the reason Ghana's employment continues to lag behind economic growth. The findings of the study established that Ghana's unemployment situation is more of a demand-side effect than a supply-side due to the weak employment creation effect of output. The categories of persons considered vulnerable to unemployment, according to the study, are the youth and urban residents, with education and sex acting as moderating factors. Reservation wage was

observed to have an increasing effect on unemployment, implying that higher reservation wages increase unemployment.

A different dimension of the unemployment situation in the Ghanaian economy was studied by Biney (2015), who focused on graduate unemployment. The result showed that the employment situation is changing because, in the past, unemployment was much associated with a lack of adequate education, but now, it is a major challenge facing graduates. In a similar study on the magnitude and impact of youth unemployment in Ghana, Poku-Boansi and Afrane (2011) did a descriptive analysis of census data spanning 1960 to 2000. The study conjectured that jobless and unemployed youth are compelled to identify alternative sources of livelihood. Therefore, they end up engaging in several forms of activities in the informal sector, sometimes in unlawful ventures such as robbery and prostitution. The study, further, attributed the growing urban-youth unemployment to heightening levels of (rural-urban) migration.

The unemployment situation in Ghana has attracted the concerns and interests of many researchers. This is evident in the extensive studies on the unemployment situation in Ghana. These comprehensive studies have largely focused on the determinants and causes of unemployment and informal employment as well as the effects and impacts of unemployment without considering the duration dimension of unemployment in Ghana which is an equally important aspect of unemployment. The present study complements the existing studies on unemployment in Ghana by examining the covariates of unemployment duration, as well as the effects of the duration on migration intention and social participation.

Covariates of Unemployment Duration

Unemployment duration, like many other variables, could be influenced by a myriad of factors. Covariates of unemployment duration have been studied extensively in many advanced economies since the early 1980s. However, they hardly feature in studies of this kind in developing countries, especially in Africa. Given this, the study presents the review of covariates of unemployment duration in two parts, that is global and African contexts.

Covariates of Unemployment Duration (global context)

Bairwa and Sharma (2019) analysed how the socio-economic attributes of individuals affect their employability in a particular work sector. The main focus of the study was on the manufacturing sector in India. The data for the study was from the fourth (2013-2014) and fifth (2015-2016) unit-level data of the annual Employment and Unemployment Survey (EUS) conducted by the Indian government. The study employed the logistic regression estimation technique to analyse the probabilities of employment in the manufacturing sector. The results of the study indicated that key factors such as caste, location, education and gender influence the probability to gain employment. The study, further, indicated that caste and location are more important than gender and education to determine the probability of an individual to gain employment in the manufacturing sector in India. This means that for an individual to get a job in the manufacturing sector in India, education, location, gender and caste count a lot.

Rahman, Khan and Jamal (2019) designed a study to estimate the waiting time of employment for university graduates in Khyber in Pakistan regarding the educational level and specialisation in their field of study. The

contributions of socio-economic status, language proficiency, methods of searching for a job, job preferences, nepotism and demographic characteristics of the individual were equally considered concerning unemployment duration. The authors used the multi-stage probability sampling technique to collect data from 791 respondents. The analyses of the study were based on the Kaplan Meier, Cox regression and Cox Proportional Hazard models. The analyses established that the unemployment duration of university graduates was one year and three months during the period 2003-2014. The study identified educational level, language proficiency, age, socio-economic factors, nepotism and specialisation as significant factors influencing unemployment duration.

Barrera-Osorioa and Bayona-Rodríguez (2019) analysed the impact of the attendance of prestigious universities on the trajectory of education and outcomes of the individual's labour market. The study used data from the processes of admission from a highly selective Colombian private university. The authors estimated both enrollment (treatment on the treated) and offer of admission (intent to treatment) effects. The study found a positive impact on the probability of employment. The results suggested that prestigious universities are more effective sources of signaling in the labour market. This means that the status of the school also plays a role in the employment of its graduates.

Marek, Damm and Su (2016) used German data and a semi-parametric Cox proportional hazard model to empirically determine the effect of social capital on employment duration in German. With emphasis on the social activities (network) aspect of social capital, the study found that unemployed persons with good social capital tend to have high probabilities of securing

new employment. The implication, therefore, is that social capital decreases the risk of remaining unemployed and shortens the waiting time to employment.

Dănăcică (2015) analysed the probability of re-employment of unemployed youth in Romania. The study used a dataset with completed spells of unemployment. The author employed the multinomial logistics regression to analyse the effects of different characteristics of individuals on the probability of re-employment for unemployed youth aged 15 to 29 years. The results established that a young woman, compared to a young man, has a higher probability of exiting in non-participation than going into long-term re-employment, but higher odds of exiting in a long-term job than a short-term job. The results also indicated that women have a lower probability of re-employment in the short-term and long-term than men. For the youth and young people, the study indicated a diverse state. The study concluded that among young people age reduces the gap between men and women. This implies that age and gender are key variables that explain the probability of employment.

Dănăcică and Cîrnu (2014) analysed the factors that have an impact on the spell of unemployment and exit destination of both males and females in Romania. The analyses were based on registered unemployment spells. The data were gathered from the National Agency for Employment. The authors estimated the effects of the various explanatory variables for the spells of employment of men and women, utilising the semi-parametric Cox proportional hazard models and non-parametric models. The results of the study suggested that the impact of explanatory variables differs significantly

between men and women. Age has a different effect on the unemployment spells of both men and women; an additional year for women decreases the exit rate to employment while an additional year for men lowers the rate of job exit. Another interesting result was that the median survival time until employment or re-employment is shorter for women aged 15 to 34 years than for men of the same age. Education has a significant effect on the probabilities of the spell of unemployment and re-employment for both men and women. The absence of work experience and the presence of a disability have a more pronounced negative effect on unemployed men than women.

Dănăcică (2012) analysed the effect of education on the re-employment hazard of Romanian unemployed women, during 2008-2010. The study was based on women who registered a spell of unemployment. The data were sourced from the National Agency for Employment in Romania. Using non-parametric and semi-parametric competing risk-model estimation techniques, it was found that education has a significant effect on the re-employment hazard of unemployed women. The study also indicated that the median survival time was reduced until the occurrence of employment. The study indicated that men have a higher instantaneous rate of hazard to employment compared to women. According to the study, education plays a significant role to improve the re-employment hazard rate and reduce the unemployment duration of Romanian women who are unemployed. Age at the start of the unemployment spell has a significant influence on the re-employment hazard of women. Furthermore, unemployed women from rural areas have a lower re-employment hazard compared with women from urban

areas. Also, having a good health condition improves the re-employment chances of unemployed women.

Haynes, Higginson, Probert and Boreham (2011) examined the social determinants of time to exit unemployment to employment (unemployment duration) and the variations across functional economic regions, separately for women and men. The study took a life-course approach. The data of the study were gathered from the very first eight waves of the Household and Labour Dynamics in Australia Survey. The authors applied a multilevel discrete-time piecewise constant hazard model across recurrent episodes of unemployment. The study found that marital status and age are significant drivers for reducing men's unemployment time, while the presence of children under five years increases a woman's unemployment time. The study also found that unemployment duration varies across functional economic regions for women even after accounting for social factors and previous experience in labour force at the level of the individual.

Kong and Jiang (2011) outlined the factors affecting graduate unemployment spells. The study utilised a dataset that covered the universities and vocational colleges within the special region of Beijing and it included all majors offered in the region. The study employed a duration model in analysing the factors that affected unemployment duration. The duration model had the parametric survival, semi-parametric and non-parametric approaches. The results of the study showed that graduates find jobs faster if they graduate from a high reputation four-year university. This, according to the study, was the fact that they have reputations, compared with the four-year and three-year colleges.

Riga (2007) analysed the unemployment duration effects of demographic variables in Latvia. Where separate models were presented for men and women, the study found men to have a relatively higher chance to exit unemployment spells than women within the first three months of unemployment, but beyond that, women have a better likelihood to exit unemployment. For the whole sample, men again were associated with a lower hazard rate and longer duration of unemployment than women, controlling for age, ethnicity, region, and locality, as well as education. Considering education and age, the results indicated that higher education increases the probability of transiting from unemployment to an employment state, while age reduces the chances of finding a job.

Shumway (1993) examined determinants of unemployment duration utilising the Survey of Income and Programme Participation data and event history methods in the contexts of job search and human capital models. The findings established that migration lowers the likelihood of leaving unemployment spells or increases the probability of remaining unemployed. The risk of remaining unemployed was higher for speculative migration than for contract migration. Also, unemployed individuals entitled to unemployment compensation tend to have a lower hazard rate and a higher risk of unemployment. Moreover, among the migrants, those with unemployment compensation experienced a much higher risk of remaining unemployed and longer unemployment spells than those without the compensation. Urban areas, local unemployment rates, and education were associated with lower hazard rates and longer unemployment durations.

Variables such as age, sex (male), and marriage were, however, observed to be associated with higher hazard rates and short unemployment duration.

Covariates of Unemployment Duration in Africa

In Africa, not many studies have been conducted on the determinants of unemployment duration. Notable studies in this area on the continent include Nonyana (2015), Kherfi (2015), Kisto (2014), and Serneels (2008) in South Africa, Egypt, Mauritius, and Ethiopia respectively.

In a study on the duration of unemployment in South Africa, Nonyana (2015) established that the probability of exiting unemployment spells is inversely related to the length of time an individual stays unemployed. The findings also indicated higher hazard rates for males, young adults, individuals with at least tertiary education, married couples, and persons who have work experience. The implication is that individuals who spend a short time in unemployment, males, young adults, married couples, persons who have tertiary education, and also those with work experience tend to have shorter unemployment duration.

In a similar study, Kherfi (2015) employed the 2012 round of the Egyptian Labour Market Survey and a discrete hazard regression model to examine the effects of individual-specific characteristics on unemployment duration in Egypt, while controlling for educational attainment, sex, and father's occupation and education. The study revealed a longer duration of unemployment for women and individuals who have secondary education or higher. Persons who joined the labour market at their adolescent stage were associated with longer duration relative to the older youth. Father's education was identified to have an unemployment duration reducing effect among men,

but no association was realised for women. Fathers without skilled occupations had their sons exit unemployment spells faster, with no such effect on the chance of unemployment exit among women. Married people were also found to have a lower likelihood of leaving unemployment spells, compared to their counterparts who are not married.

In Mauritius, Kisto (2014) investigated factors determining the unemployment spell among the youth in the country. The findings exhibited that females were more vulnerable to experiencing a longer duration of unemployment than males, whereas the youth with secondary or higher education as well as those with vocational and professional qualifications were observed to have a shorter unemployment spell.

Serneels (2008) interrogated the assumption that an individual's chance of finding a job declines with the length of time the individual stays unemployed, in Ethiopia. The study concluded that the probability of securing a job does not diminish with the time stayed in unemployment for the majority of the spells when the unobserved heterogeneity is controlled for in the model. Hence, the negative duration dependence assumption does not hold using the Ethiopian urban data.

It could be deduced from the afore-reviewed studies that different factors influence unemployment duration in different countries and regions. Individual-specific characteristics, locational factors and state policies on unemployment, including unemployment insurance/compensations in some jurisdictions, influence how long it takes jobless and unemployed job seekers to transit from unemployment to employment. Also, despite the extensive studies on unemployment duration, none considered the interaction effect of

migration status and educational attainment on unemployment duration. In Ghana, very little, if any, could be said empirically about factors that influence unemployment duration.

Moreover, given the fact that the joint effect of migration status and educational attainment on unemployment duration has not been considered by the available literature in this area, this study seeks to expand the existing studies on the unemployment situation in Ghana and the growing knowledge on covariates of unemployment duration in general by examining: (a) individual-specific factors that influence the duration of unemployment in Ghana, and (b) the joint effect of migration status and educational attainment on waiting time for employment.

Effect of Unemployment Duration on Migration Intention

This section of the literature review focuses on the effect of unemployment duration on migration intention. Commonly, areas with a longer duration of unemployment tend to experience high unemployment rates. This is because new entrants join the labour market and add to the number waiting to exit unemployment.

AboElsoud, AlQudah and Elish (2020) conducted a study to examine and evaluate the dynamic causality relationship between unemployment and immigration. The study was conducted in Australia with a focus on host countries. Vector Error Correction Model was employed to analyse short-run and long-run dynamics between immigration and unemployment over the period, 1980-2016. The analyses of the study indicated that unemployment and immigration showed high levels of variation over the period of study. The results indicated that there is a strong statistically significant negative

relationship between migration and unemployment. The Vector Error Correction Model and all other tests depicted an equilibrium long-run relationship between the rate of unemployment and net oversea migration. A statistically significant negative relationship was found between net oversea migration and rate of unemployment. A negative causal relationship, in the short-run, was found between unemployment and oversea migration.

Lyu, Dong, Roobavannan, Kandasamy and Pande (2019) investigated whether unemployment in rural areas pushes people to move to urban areas. The study was conducted in Jiangsu Province in China. It explored the factors that cause rural-urban migration in that province. The authors developed a migration model to fill a gap in the comprehension of how rural-urban migration reacts to variations in rural living. The data for the study was obtained from the Statistical Bureau of Jiangsu between the periods of 1987 to 2016. The results were estimated based on the Cobb-Douglas production functions. The study found that migration to urban areas from rural areas was very sensitive to unemployment rates in rural areas. The study stressed that unemployed rural people take years to internalise the shocks in employment before migrating to the cities. This implies that migration is driven by unemployment so, with a longer stay in unemployment, the intention to migrate is intensified.

Maczulskij, Böckerman and Kosonen (2018) examined the effect of job displacement on regional mobility. The authors used data from the Finnish Longitudinal Employer-Employee constructed by Statistics Finnish, which is a panel data spanning from 1995 to 2014. The authors studied whether displaced movers obtain earning and employment gains as compared to stayers that are

displaced. Using the Ordinary Least Square (OLS) estimation technique, they found that job displacement increases migration probability. However, housing features and social capital in a region decrease the propensity to move. This indicates that people do not make decisions to migrate based on solely short-term economic incentives.

According to the study, for men, migration has an immediate negative relationship with earnings. However, the connection decreases as time passes and ultimately turns positive. For both men and women, the link between migration and employment is, nonetheless, positive and persistent. For women, the study depicted that unemployment duration is negatively related to the probability to migrate. This shows that migration is influenced by unemployment duration.

Levy, Mouw and Perez (2017) investigated why people move during a recession. They used 2005-2011 data sourced from the American Community Survey (ACS) to analyse the trend of internal migration before and during the Great Recession. The authors used logit, multinomial logit, conditional logit, and latent class conditional logit estimation techniques to estimate the results of the study. In the first place, the study found that the declines in adults' odds to leave distressed labour market areas were modest during the economic downturns. Secondly, the study found economic factors, including housing values, unemployment, and labour demand, to have a substantial effect on migration. In general, the study suggested that economic factors such as unemployment motivated migrants to move before and during economic downturns.

In a similar context, Bähr and Abraham (2016) investigated the social capital and social network functions rooted therein after receiving an interregional offer of jobs. The authors examined whether the unemployed weigh social capital in a special way when decisions are made for mobility. To analyse these issues, the authors combined German Labour Market and Social Security Panel data with factory survey module data to create representative samples of both the employed and unemployed with a randomised mobility stimulus in the form of a hypothetical offering of jobs. The study results revealed mobilising effects of exposure to conflict-laden relationships with households and social networks. The authors asserted that these are predominantly noticeable for unemployed persons. This implies that unemployment is one of the key variables that influence a decision to migrate. This highlights the importance of factors influencing decision-making concerning mobility beyond simple economic considerations.

Fackler and Rippe (2016) examined the relationship between migration and loss of jobs. Utilising a panel survey 1984-2013 from German Socio-Economic Household data, the authors analysed the relationship between involuntary loss of job and regional level mobility. The study employed the hazard ratio and the fixed effect regression models to estimate the results. The results of the study showed that job loss has a strong statistically significant positive effect on the propensity to migrate. This means unemployment affects the decision to relocate.

Fendel (2014) conducted a study to examine whether the unemployed will be willing to decide to migrate to exit unemployment. The estimation of the study was grounded on panel data of the German Socio-Economic survey

between 2001 and 2009. To estimate the joint probability of being unemployed and moving, the author adopted the bivariate probit estimation technique to account for the issues of endogeneity associated with the unemployment variable that is in the migration intention model. The study's findings indicated that people who are employed have a much higher probability of work-related migration as compared with the unemployed moving to exit unemployment. Thus, the unemployed moving to exit unemployment has a lower probability than the work-related probability of the employed moving. This implies unemployment has a negative effect on migration.

Kley (2013) employed an expounded model to examine how the risk of unemployment influences migration. The study used a contrast group design to make a comparison among respondents from two German cities based on a panel survey. These respondents have diverse economic prosperity levels. The study used a generalised ordered logit regressions model for the estimations. The analyses revealed that the perceived risk of becoming unemployed undeniably activates making decisions to migrate. However, according to the study, this is more pronounced in cities that are deprived, although the unemployed do not consider to leave the city more than the employed do.

Nonetheless, people who have family, children, and partners who are living with them might outweigh the perceived risk of unemployment impact on making decisions to migrate. The study also indicated that when it concerns putting a migration plan into action, unemployed persons residing in deprived cities are more significantly constrained to migrate than those in cities that are

prosperous. The study suggested that the availability and intensity of social networks at where people currently live mainly account for these effects.

Furlanetto and Robstad (2019) utilised data based on the Norway quarterly time series data from 1990-2014. The study also employed the Structural Vector Autoregressive model estimation technique to analyse the data. The study examined the effect of shocks in migration on factors including, but not limited to, prices of houses, rate of exchange, public finances, productivity, and unemployment. The results of the study indicated that shocks in immigration and labour supply have a significant immigration impact. The study again indicated that increase in unemployment results in an increase in shocks of immigration to exit.

Espinosa and D´ıaz-Emparanza (2019) investigated the relationship that exists between the rates of international immigration and rates of unemployment. The study was conducted in Spain. The study covered the time series periods spanning 1981 to 2016. The vector autoregression models were used to estimate the results of the study. The results showed that as a result of Spain's features of policy of migration, there is cointegration between immigration and unemployment. The study indicated that this causal relationship is positive. This is because the greater the unemployment, the greater the immigration.

Esipova, Julie and Anita (2011) empirically analysed the effects of unemployment on global migration potential. The authors utilised 2009-2013 Gallup data for the analyses. The study showed that despite the fact that about 630 million people have the desire to migrate abroad without coming back during the period under study, just eight (8) percent of the total population of

the world have plans to migrate abroad, and still a lower share actually make preparation to move. The study indicated most of the people who have the desire and willingness to migrate abroad are individuals who are unemployed. This means unemployment has a positive effect on migration intentions. The intention becomes intense with a longer unemployment duration.

Öztürk and Özdil (2020) investigated the relationship among growth, migration and unemployment in the Organisation for Economic Co-operation and Development (OECD) countries. The panel data of 19 OECD countries spanning 1990 – 2016 were analysed using the Autoregressive Distributed Lag technique. Short- and long-term results were obtained. The study indicated that migration is affected by the economic conditions of the host countries. In addition, the results showed that immigrants are mainly related to total unemployment, which is a better indication of employment opportunities in the host country. This implies unemployment has a positive effect on migration.

Guild and Carrera (2012) examined labour migration and unemployment. This study was conducted in the situation of the consent of Bulgaria and Romania to the European Union and the rules of workers' freedom to move into the European Union. Precisely, the study addressed how intra-European Union migration of labour relates to rates of unemployment and employment in the host countries or home countries during periods of unsettled growth. The findings of the study were grounded on analyses of rates of employment and migration from 1975-2010. The study found that most of the workers from Bulgaria and Romania migrated to Spain and Italy. However, a far fewer number of them went to the United Kingdom and

Germany. The study also indicated that migration increased where employment was low, implying that high unemployment levels increase the intention to migrate and subsequent migration.

Beyer (2016) analysed the performance of migrants in the labour markets with the aid of a survey method. The study was conducted in Germany. The study found that labour market participation rates were lower for migrants than domestic workers and unemployment was higher as well. This study indicated that higher unemployment rates trigger migration and these migrant workers had lower wages compared to the domestic worker. In contrast to the findings of Beyer (2016), Altunc, Ucan and Akyildiz (2017) showed that there was no causal relationship between migration and unemployment in Turkey.

However, Çelik and Arslan (2018) conducted a similar study to test the relationship between migration and unemployment in Turkey. The data for the study was for the period, 2014-2016. The analyses were conducted within the context of the Spearman correlation technique. The overall analysis of migration and unemployment showed dissimilar results. The study found a strong and positive relationship between migration and unemployment, in general, and unemployment among the youth. The finding implies that unemployment induces migration.

Chamunorwa and Mlambo (2014) analysed the effect of the labour force of immigrants on unemployment in South Africa. The data for the study was from 1980-2010. The authors employed the OLS estimation techniques for the analysis. The results indicated the existence of a positive relationship

between migration and unemployment. This implies when there is an increase in unemployment, migration aspirations increase.

Baumann, Svec and Sanzari (2015) examined the effect of unemployment on migration. Based on the theoretical model, the study displayed migration is merely not affected by unemployment. Rather, shocks in unemployment force migration to occur among residents to the anticipation of the rate of unemployment in their area. Testing this theory, the study devised a strategy for utilising data at the state-level in the United States over the period, 2000 to 2010. The results established that changes in the monthly unemployment rates produce immensely diverse effects on migration, relying heavily on whether a new rate of unemployment is within prospects or not. That is when shocks in unemployment push a new rate of unemployment beyond the expectation of people, a percentage point increase in the monthly rate of unemployment results in people's out-migration. The study, again, depicted shocks in unemployment beyond expectations have a far greater effect on migration than shocks in unemployment within expectations.

Cebolla-Boado, Miyar-Busto and Muñoz-Comet (2015) explored the effect the economic crisis in Spain had on the extent to which education protected natives and migrants against unemployment. The study used random constant estimation techniques for the analysis. The data were sourced from the Labour Force Survey for the period, 2003 to 2012. Precisely, they analysed the market value of the educational credentials of migrants from East Europe, Latin America, and Africa as against what the Spanish males aged 16-50 years held. The study also identified that the migration intentions of these migrants were due to unemployment in their countries of origin.

Darkwah and Verter (2014) examined the determinants of international migration. The authors conducted the study using annual time series data spanning 1991 to 2011in Nigeria. The authors adopted the OLS estimation technique for the analysis. The results indicated that remittance of migrants, growth in population, and unemployment levels are the main covariates of migration to other countries from Nigeria. The study further showed that a country with high rates of unemployment has a likely movement of people to reduce pressures on labour markets. Thus, unemployment is one of the main determinants of migration. The study concluded that socio-economic and political issues motivate people to migrate from Nigeria.

Other Determinants of Migration

Abraham, Bähr and Trappmann (2019) analysed the gender differences in willingness to migrate for an offering of interregional jobs. The study focused on all cohabitating couples to address its objective. The study employed a large household survey from wave five of Labour Market and Social Security panel study from Germany and the OLS estimation technique for the analysis. The study found that for married people, men demonstrate a higher willingness to migrate than women. However, for singles, both men and women have the same willingness to migrate. Also, the study found that the variables resulting from standard mobility and movement theories have some bearing on the elucidation of willingness to migrate. Again, the results indicated there are persistent gender differences even after controlling for these variables to make migration decisions. Consequently, women are disadvantaged when considering interregional job offers.

Also, Dao, Frédéric, Chris and Giovanni (2018) used Gallup data to evaluate the rates of aspirations of migration, by controlling for levels of education. The study suggested that comparatively, people who are educated and young tend to show higher migration aspirations than older and uneducated ones. Additionally, the study found that geographic dynamic variables including the potential migrant's home country distance and the desired destination as well as the existence of social networks at the desired destination are pertinent variables that influence aspirations of migration of both individuals who are highly educated and those with low levels of education. For individuals who have low levels of skills, income is a major determinant of their aspirations to migrate.

Bernard and Pelikh (2019) argued that there is a tempo effect that leads to the underestimation of temporary migration levels. They further argued that when there is a lower probability to move, the migration ageing effect leads to moves that are higher-order to reduce migration exposure shifts to older ages. The authors combined hypothetical scenarios with empirical evidence from a variety of countries in China, Australia, North America, and Europe. The study demonstrated how analyses of migration are affected by some key variables such as ageing and tempo. The results suggested that both tempo and ageing effects are possible to happen if the overall trend is to later ages at migration. Utilising retrospective survey data in Europe, the study demonstrated that individuals who leave the home of their parents very early are more likely to make advanced second movement than individuals who leave their parents' home very late. The study, thus, reported higher migration

numbers among the youth who are early movers than adults who are late movers from their parental homes.

Foster (2017) conducted a study to analyse the influence of shifts in composition on an associated migration reduction over different distances. The study permitted rates of variations in groups with the occurrence of reductions. The author used population survey data from 1982 to 2015. The study employed the Oaxaca–Blinder estimation technique in decomposing the intra-country migration, intra-state mobility, and inter-state migration reductions. The results established that increases in diversities and aging account for more than half of the reductions in mobility since 1982. The study also showed that inter-state migrations are strongly influenced by pressures exerted by changing ethnocidal composition, whereas local migrations are mainly influenced by ageing.

The study further revealed more dramatic reductions amongst whites who are not Latinos and people who are below the age of 35, in addition to a noticeable delay and reduction in the rates of peak mobility with each sequential birth cohort. Increases in levels of education, region-specific, and group-specific factors exert a greater effect on long-distance migration. Thus, levels of education, region, groups, age, ethnicity, and other factors influence migration.

Migali and Scipioni (2018) analysed aspirations and migration intentions. The study was based on data from the Gallup World Poll from the period, 2010 to 2015. The study estimated traits of levels of individuals that are related to aspirations and migration intentions across groups of countries in diverse regions and with varying levels of income. The study brought together

earlier hypotheses concerning aspirations in migration in testing the hypotheses under quite a few specifications while keeping discrete conclusions consistent with aspirations of migration and migration intentions to appreciate diversities among the hypotheses. The results, which were based on the logistic regression models, depicted that one's satisfaction with a living standard is related to a lower probability of craving to migrate, whereas the relation with the concrete preparation to move is not that clear.

According to the findings of the study, some traits such as being born abroad, being a male, having networks and connections abroad, and being highly educated are significantly related to a higher probability to prepare for migration abroad. The study indicated that these aspects, correlated with the economic situation of someone, are not always the case for all contexts and across specifications. This implies that even though these aspects influence migration, they are not consistent with all specifications, which suggests that contextual analysis is important.

Golley and Kong (2013) investigated the trends in intergenerational patterns of attainment of education. The study employed a survey conducted on the 2008 rural-urban migration in China and Indonesia. The study found that intergenerational relationship was higher in urban areas and among non-migrants than in populations in rural areas.

According to the study, the lower migrations detected in urban areas and among non-migrant populations were a result of the fact that most of them completed higher levels of education (inequality in education), with some of these older cohorts advancing upward on higher education levels. The rural children were moving down in education levels relative to their parents.

Conversely, the urban children seemed to mimic the level of education of their parents. The study established that persistent intergenerational transmission of higher levels of education in urban areas, coupled with both upward and downward mobility in rural areas, was likely to worsen the rural-urban difference in China. The study recommended the availability of education opportunities and improvement in the education of rural and migrant populations. This implies that education exerts pressure on migration aspirations.

Makina (2012) used a dataset on Zimbabwean migrants living in South Africa to analyse the determinants of the probability of returning to Zimbabwe. The author analysed the migrants' return intentions by means of a logistic regression estimation technique that focused on 10 demographic and socio-economic characteristics. The study showed that migrants who had dependents back home are more likely to return, as compared to migrants who had no dependents. The study stated migrants who work as artisans, drivers, teachers, and health professionals are more probable to return.

However, health professionals are more probable to return home compared to other workers. Again, it was established from the study that migrants who had university degrees are more likely to return home, with higher odds ratios. Largely, the higher the education levels of the migrant, the higher the probability of migration back home. The author acknowledged age, number of dependents, education levels, reason for migrating, economic activity in the host country, income levels and the duration of stay abroad as the significant determinants of migration intentions of returning home.

Priya and Matteo (2011) analysed the relationship between migration and human development in India. The study discussed health and education outcomes among diverse social groups. The study demonstrated that in the case of higher-class individuals, international migration is high as a result of the fact that they consider the cost of movement to be low whereas the low-class people consider migration to be expensive. This means that the cost of migration also plays a role in migration intentions.

Lyu et al. (2019) investigated whether unemployment in rural areas pushes people to move to urban areas. The study was conducted in Jiangsu Province, China. The authors explored the factors that influence rural-urban migration in the province. The authors developed a migration model to fill a gap in the comprehension of how rural-urban migration reacts to variations in agricultural inputs such as availability of water and labour, and also how the population of the rural areas forms an expectation of a better livelihood in the urban areas. The data for the study was obtained from both the Climate Research Unit's hydro-meteorological time series data between 1985-2013 and the Statistical Bureau of Jiangsu from 1987 to 2016. Cobb-Douglas production functions were applied to estimate labour demand which is driven by different factors of production. The analyses showed that there is no evidence of people pulled to cities by better income prospects and pushed out of rural areas to urban areas by the scarcity of water. The study, thus, indicated better income in urban areas and unavailability of water in rural areas do not cause people to migrate.

Mora and Taylor (2005) investigated the determinants of migration in rural Mexico. The authors used the Mexico National Rural Household Survey

data. They modelled international and internal migration at the same time to non-farm and farm activities. Using the multinomial logit models, the authors revealed that schooling has a significant positive effect on internal migration to non-farm jobs but not farm jobs. However, it has no effect on international migration, which, for rural Mexicans, generally requires an unauthorised entry. Also, the study found that wealth has a negative effect on internal migration to non-farm jobs. However, wealth has a positive effect on international migration to both farm and non-farm sectors. Having secured access to markets outside the village significantly increases migration. Thus, factors such as education, wealth, and access to infrastructure including markets have effects on both internal and international migration intentions of people.

Patnaik, Satpathy and Mandal (2014) attempted to understand the determinants of migration from rural to urban areas. The study identified better education, health care facilities, entertainment facilities, better employment opportunity, an anticipated increase in income, presence of excess workforce in rural areas, nature of employment, and reduced income loss risks as important factors that induce migration. The study indicated that individual migration occurs due to less land holding while family migration occurs due to marriage, less land holding, in pursuit of higher levels of education, and social protection. The study, again, depicted women migrating for increased employment prospects and social circumstances, geographic closeness, and improved living standards, while children migrate for job search. Thus, people migrate for social and economic reasons and migration decisions are taken by both adults and children.

Faisal, Yasir, Muhammad and Arshad (2013), a similar study, examined the socio-economic determinants of rural-urban migration in Sargodha, Pakistan. The authors intended the study to recognise the decision to take migration from rural areas to urban areas. The results established that poor health and educational facilities, lack of social amenities, and limited income opportunities lead to rural-urban migration. Thus, this study confirmed Patnaik et al.'s (2014) observation that social, education and economic reasons account for why people migrate from rural areas to urban areas.

Naude (2010) also investigated the determinants of migration from 45 Sub-Saharan African (SSA) countries over the period 1965-2005. The study employed the system generalised method of moments (GMM) estimation techniques in analysing the data. The study showed that inadequate job opportunities and armed conflicts have significant effects on migration. However, the study found less importance of demographic and environmental pressures in having a direct effect on migration, even though they might have an indirect effect via conflict and job opportunities. Population density influences migration. Other determinants including environmental degradation, irrigation, and water stress index do not influence migration. The implication is that resources, environmental factors as well as economic and social factors are determinants of migration.

Vidal and Lutz (2018) examined internal migration as part of recounting life paths, scrutinising stability and variation across socio-historical settings from post-war Germany. The study inquired whether the family structure and labour market life paths interconnect to migration experience in young adult ages for people who were born between 1939 and 1971. After

that, the study established how transitional variations to adulthood are reflected in internal migrants' life trajectories. The authors accomplished their aim by utilising exploratory mining of event histories on retrospective monthly records of life events that occurred between the ages of 16-30 years from the West German samples of the German Life History Study.

The analyses revealed that early adult life structure courses interconnect to experience in internal movements. People who move and those who stay have experienced an increased variation in trajectories of life across socio-historical periods. These, according to the study, are more evident in the labour market course than in the family course. A variety in internal migrants' paths depicts the multifaceted ways the youth negotiate paths of life and align with the generalised lengthening of transitions from school to work and the delay of family projects. This implies that experiences in life trajectories and diversities account for migration.

Shuttleworth, Östh and Niedomysl (2017) considered the experience of Sweden, utilising data from the Population and Census register. The study outlined moves in inter-parish levels between 1900-2015. Shorter distance moves from the early 1970s were also considered. According to the study, rates of migration increased after declines in the 1980s. A scrutiny of the variation in the rate of migration between the 1990s and the 2000s suggested that ageing has no significant effect on migration but rather compositions in the population such as levels of education and status of marriage have a significant effect on people migrating from one place to the other.

The study indicated that an increased level of education has a significant positive effect on long-distance rates of migration but again, group-

specific rates have also increased due to job and service centralisation, expansion of higher education, and a regime of welfare that decreases movement risks. Thus, wealth and education have a positive effect while age does not affect migration intentions.

Najib, Abdullah, Narresh and Juni (2019) conducted an overall review of issues connected to brain drain, focusing mainly on healthcare workers from different countries. The study showed that internal brain drains occur mostly in low- and middle-income countries, as potentials to generate income were generally detected within the private sector. Nevertheless, international migration (external brain-drain) is generally pronounced in high-income countries.

The study again found that factors such as career development, furthering of education, availability of resources, hospital management and infrastructure, family and political issues, training and development, and financial rewards mainly are determinants of brain drain. The study also indicated that factors such as the potential to generate income and inadequate wages despite poor-working conditions and economic instabilities again determine brain drain. This means that migration - both internal and external brain drains - is influenced by pull factors from host countries and push factors from countries of origin.

It is clear from the above studies that migration studies are available in the literature. The effect of unemployment on migration is also well articulated. The review of relevant literature relating to unemployment and migration decisions has revealed that a high incidence of unemployment is a key driver of migration. However, the effect of unemployment duration on

migration is, fundamentally, missing, implying that a key component of unemployment has been neglected and must be considered. Also, gender and locational analyses are limited in the studies reviewed. Moreover, few of these studies concentrate on Africa. This could, in part, be blamed on data limitation. The studies on Ghana concentrate on the incidence of unemployment, with no attention to the duration aspect of unemployment. Specifically, the studies on Ghana have not, to the best of my knowledge, considered how unemployment duration affects the intention to migrate. This study, therefore, complements the existing studies on unemployment and migration by empirically examining the effect of unemployment duration on migration intention in Ghana. This study further deviates from the current literature by conducting gender and locational analyses.

Effect of Unemployment Duration on Social Participation

Kunze and Suppa (2020a) examined the heterogeneity in the effects of unemployment on social participation. The study employed a quantile treatment effect using entropy balancing, focusing mainly on unemployment to solve the issues of endogeneity. The data for the study were based on the German panel survey. The study showed varying effects of unemployment on public social distribution activities. For individuals in the lower and middle public activities distribution, however, the study found that unemployment has no effect on private social participation for individuals at the lower part of the outcome distribution and is weakly positive for those in the middle. Thus, for the lower quantile, unemployment has no effect but for the middle and upper quantile, unemployment has a positive effect on social participation. This means unemployment has effects on some categories of people.

Kunze and Suppa (2020b) estimated the effects of unemployment of individuals on the social participation levels of their spouses. The authors used the German Socio-Economic Panel study data (1992-2011). The regressions were based on the matching difference-in-difference estimation, where the treated group had about 146 couples and the control group had about 20,000 couples. The results showed that unemployment inflicts a strong negative effect on public-social activities of affected spouses both directly and indirectly. They found that there are significant reductions in public-social activities and significant increases in private-social participation. Private-social activities of either spouse, nevertheless, are only found to increase, if the indirectly affected spouse is unemployed. Their results implied that active labour market policies account for the effects of spillovers within couples and accept a family view. Thus, marital status and unemployment have effects on social participation.

Gundert and Hohendanner (2015) analysed the impact of labour market programme of Germany called 'One-Euro-Jobs' on individuals who are unemployed onto social integration. The data of the study was sourced from the Labour Market and Social Security German panel study from 2006-2013. The authors examined whether this would improve the social integration sense of the unemployed. Thus, they analysed how specific features of the programme, evaluation by participants of the programme, and the quality of interactions with welfare officials connected with their subjective integration. The analyses were done using the fixed effect, random effect, and hybrid random effects regression estimation techniques.

The results indicated that unemployed individuals do not participate in general. In terms of duration and hours of working, the study concluded that One-Euro-Jobs allow for a stronger participation effect similar to regular jobs. Also, the study concluded that the social interaction quality at the local unemployment agencies is key, that is, when supported, it is beneficial to participants of One-Euro-Jobs. Again, if participants perceive participation to be voluntary and have social and financial benefits, they are more probable to experience improvement in their social integration. Thus, unemployed individuals mostly engage in voluntary activities to enhance their participation.

Christoph and Hohmeyer (2012) also conducted a study to analyse the evaluation of participants of a programme of One-Euro-Jobs in Germany. The data were sourced from the Labour Market and Social Security, which is a German panel data. In general, participants considered that the participation effects of the One-Euro-Jobs programmes on chances of employment consequent are low. The study indicated most of the participants agreed that One-Euro-Jobs helps to 'socialise with others' and to do 'something useful' even though the study analysed not the relationship between programme participation and subjective social integration directly. This shows that unemployment leads to low participation in employment programmes.

To address the same issues, Wulfgramm (2011) examined the impact of employment status of the One-Euro-Jobs programme on perceived social participation or integration using the Labour Market and Social Security dataset. The data were analysed using the OLS estimation technique. The results showed that unemployed persons display lower integration or

participation levels than the employed. The study further showed that participants of the programme are ranked between when compared with those fully employed and those who are unemployed. Using the fixed effect regression estimation, the results showed that the One-Euro-Jobs programme has the same positive effect as regular employment on participation contrary to the anticipation results. This implies any form of employment—formal or informal, decent or indecent job—has a positive effect on formal participation.

Julkunen (2002) also explored the long-term effects of unemployment on social participation. The study focused mainly on young people from Scotland and other Nordic countries such as Finland, Iceland, Denmark, Sweden, and Norway. The results exhibited that comparing the Scottish liberal model, the Nordic social-democratic welfare model is more effective to reduce the negative impact of unemployment on sociability. The study also revealed significant changes in social participation of the unemployed among the Nordic countries, with Denmark being by far the most successful in maintaining high levels of social participation. This demonstrates that in some countries, unemployment leads to positive effects on social participation while in some countries, unemployment has negative effects on social participation.

Brand and Burgard (2008) evaluated the impact of unemployment that arises from closure of firms, that is, displacement, on a variety of diverse social participation types - informal and formal. The study utilised Wisconsin Longitudinal Study data in the United States. The results indicated that unemployment has a long-lasting impact on social participation which continues longer than the real unemployment spells. Again, the study established that unemployment has a true causal effect on social participation.

The study, moreover, indicated that the relationship between social participation and unemployment is negative, lasting after selection effects were accounted for. This presupposes unemployment has negative effects on social participation.

Cabane (2011) used the German Socio-Economic Panel data to analyse the duration of unemployment on leisure sports participation. The Weibull parametric estimation model, as well as Heckman and Singer semi-parametric frailty, was chosen to consider heterogeneity. The results indicated that practising sport weekly during unemployment is significantly associated with the likelihood of exit from unemployment. This implies that unemployment leads to sports participation which, in turn, leads to the likelihood of exiting unemployment.

Dieckhoff and Gash (2015) investigated how unemployment affects the level of social engagement in European countries. The study aimed to analyse what country factors are linked to decrease or increase in social participation to identify different effects of macro level variance on unemployed workers' propensity for social participation, compared with employed workers. The data for the study was sourced from the 2006 European Union Statistics on Income and Living Conditions module on social participation. The study comprised 25 countries. The study employed multi-level modelling to generate the estimates of the macro variables.

The study results showed that the level of social participation varies across the countries under study. However, the study confirmed the unemployed have lower levels of social participation compared with the employed workers. Again, the study revealed that in societies where the

unemployed are exposed to risks of poverty, there is a big gap between the unemployed and the employed individual's social participation. This implies that unemployment and other macro-level variables affect the degree of social participation.

Turcotte and Gaudet (2013) examined the formal social participation of full-time workers in Canada. The study focused on full-time workers who were aged between 25 and 54 years. It aimed to analyse the factors that prompt these workers to commit to organisations and groups and the possible obstacles to hinder them from actively participating in volunteering activities. The study examined whether the increase in full-time employment is followed by a reduction in everyday rates of social participation. The study used data from the 2010 General Social Survey and the Canada Survey of Giving, Volunteering, and Participating in 2010 for the analyses. The logistics regression models were used to estimate the results. The results showed that full-time workers are less likely than unemployed people to be regular volunteers (formal social participation). The study found little correlation between the sector of employment and social participation. This means that unemployment has a positive effect on formal social participation

Rözer, Hofstra, Brashears and Volker (2020) analysed whether unemployment leads to seclusion. The authors argued that unemployment consequences for personal social networks vary from one social group to the other and by the unemployment length. The study used Swiss Household longitudinal panel data spanning 1999 to 2010. The analysis focused on three recurrently used social network statistics: (a) network size, (b) contact frequency, and (c) perceived acquaintance, family, neighbour, and friend's

support. The authors estimated how short (less than one year) and long-term (greater than one year) unemployment related to these observed characteristics of networks. The analyses also utilised a series of fixed effect models.

The study found that short-term unemployment is more probable to reduce sociability while long-term unemployment is more frequently related to a rise in sociability. Also, the differences in the network vary between the dissimilarity in social network facets. Unemployment effects, for long-term unemployment cases, are more negative or less positive for social network support compared with network size and frequency of contact. The results also offered a more nuanced perception of the generally presumed social withdrawal due to unemployment. The study further found that older individuals appear to lose social contact after short- and long-term unemployment. However, younger individuals gain social contact after long-term unemployment as their network size and contact frequency increase when unemployed. Unemployment has a more pronounced effect on weaker ties than stronger ties. This means that unemployment has varying effects on the informal social participation of older and younger individuals. Nonetheless, the effect is more pronounced when the length of unemployment is extended.

Atkinson, Liem and Liem (1986) examined the social cost of unemployment and its implication for social support. The study used a sample of 82 unemployed American families. The interviews were conducted with both spouses. The study established that unemployment does not affect any of the indicators for outside household contact with others and support. The implication is that the indicators for support and contact with others external to the household are not affected following unemployment. Nevertheless, there

are changes in family relationships, which are shown by a failure of marital support. Additionally, duration of employment (length of employment) does not affect these contact measurements, yet this resistance to change is more noticeable for white color workers and less so for blue color workers. Thus, contrary to other previous studies, unemployment does not affect informal social participation, but rather, marital support does.

Pohlan (2018) evaluated unemployment and social exclusion in Germany. The study was based on 7,682 respondents comprising 7,047 employed and 635 unemployed persons. Empirically, the study found that the reduction in social participation is less for women than for men following unemployment. This implies informal social participation declines for both men and women when there is unemployment. However, relationship with people's closest friends is not much affected by unemployment. The findings of this study corroborate that there is no decline in social contact numbers for both the low and high-educated individuals, but that social engagement declines most for the lower educated. This means unemployment has effects on informal social participation for both men and women though the number of contacts is minimally affected by unemployment.

Pohlan (2019) again studied the effect of loss of jobs on economic and social outcome variables that affect societal exclusion. The study found that loss of jobs has predominantly strong effects on the perception of individuals about how well they can participate in social activities, life satisfaction, and access to economic resources as well as the mental health of the individuals. Furthermore, the study showed that the strength of the effects differs with

socio-economic factors including whether the individual has a partner or education. Unemployment has effects on informal social participation.

Lindner and Peters (2014) examined whether loss of parents' jobs has effects on family arrangements and analysed effects of unemployment on family arrangement changes. The authors compared children who experienced events of unemployment of parents with children who did not experience such an event in evaluating the effect of job loss on family arrangements (social participation). The study used Survey of Income and Programme Participation data from 1996 to 2008 in the United States. Employing the binary and multinomial logit regressions, the results showed that children who experienced parental unemployment are more likely to see a destabilising change in family arrangements in successive months. The study suggested that the negative consequences of losing a job extend beyond the well-being of the unemployed parent. Job loss of parents can bring about family instability (low social participation). This suggests that unemployment has a negative effect on social participation.

Gallie, Paugam and Jacobs (2003) conducted a similar study on 11 European Union countries. The study concluded that unemployed persons do not decrease their sociability with their neighbours more than those who are employed. Based on nine countries, including the United Kingdom, Greece, and Spain, unemployed individuals increase sociability with others. In all the countries, unemployed individuals are more likely to meet up with friends often. However, it is only in Germany that unemployment results in declines in memberships of organisations or clubs. This implies that unemployment has differing effects on the social participation of people.

In conclusion, the effect of unemployment on social participation has been studied largely in Europe and Asia with mixed findings. While unemployment has no effect on the social participation of some categories of persons, it negatively impacts the participation of others especially those with weaker social ties. These studies fundamentally focused on the effect of unemployment (incidence) on social participation with little or no concentration on the duration dimension of unemployment. This study builds on the existing studies by investigating the effect of unemployment duration on social participation in Ghana.

Other Determinants of Social Participation

Ahmadvand and Sharifzadeh (2012) identified factors that influence rural women's social participation in Boyer-Ahmad County, Iran. A simple cluster sampling technique was used to select a total of 250 rural women who were interviewed with the aid of a questionnaire containing open and closed questions. The analyses of the data showed the existence of a correlation between the social participation of rural women and variables such as women's attitudes, age, social capital, education, media, level of information, and job. Social factors including age, family number, and social capital were among the important factors informing the social participation of rural women. Furthermore, the discriminate function of hierarchical regression modeling results showed that among the variables postulated in the model, age, family number, social capital, education, level of information, and job were the most important determinants of social participation of rural women.

Mehrotra and Bail (2018) examined the effect of community-based and individual-level factors on activities of popular social participation in China.

The study was based on older and middle-aged adults who had a stroke. The study utilised longitudinal data gathered by Retirement Longitudinal Study and China Health on those who survived a stroke. The study period was from 2011-2015. The results of the study indicated that females were more likely to interact with friends than males and that stroke survivors of older age and lower education levels were more likely to go to a community club to play table games. Those with impairments in activities of daily living and instrumental activities of daily living were less probable to social participation.

The study also found that people who are depressed are more likely to go to a community club to play table games. After controlling individual-level factors, the study established that community-based factors (having available rooms for playing table games in the community) have diverse impacts on interacting with friends and going to a community club to play table games. This shows that social participation is influenced by other factors such as gender, health status, demographic characteristics, and facilities.

Ahmad and Hafeez (2011) conducted a study to identify the major factors related to the social participation of older people in urban Lahore. Social participation was deemed to have a strong bearing on the health and life quality of older people. The study adopted data from the 2006 survey on the management of healthy ageing and conditions that are chronic. The outcome of the study showed that social participation of older individuals is significantly related to widowhood status, presence of severely limiting chronic conditions, gender, and socioeconomic positions. Again, chronological age is largely credited with reduced participation in social life.

However, the study indicated that gender and socio-economic status are significant factors in determining the social participation of older people. This shows that age, gender, socio-economic status, marital status, and health conditions have diverse effects on social participation.

Dawson-Townsend (2019) analysed social participation patterns and their associations with the health and well-being of older adults. Utilising two waves of the Swiss Household Panel, he performed a latent class analysis to attain discrete profiles of social participation of adults aged 60 years and above. The Pooled Ordinary Least Square estimation model was run in the first analysis to establish a benchmark and individual fixed-effect regressions were used in the second analysis to make use of the repeated observations per individual over time. Descriptive statistics and regression methods were used to study group compositions and evaluate connections with positive and negative affect, satisfaction with life, and self-assessed health. Controlling for characteristics of an individual's time-invariant, the study found that most of the positive associations between well-being or health and social participation become small and insignificant, which is suggestive of self-selection into various activity profiles. Thus, health has a positive effect on social participation. However, time-constant characteristics of individuals reduce the effect of health on social participation.

Marsh, Agius, Jayakody, Shajehan, Abeywickrema, Durrant and Holmes (2018) conducted a study based on data from a baseline survey and focus group discussions. Those considered were people older than 60 years who lived in Sri Lanka. Specifically, people in Tamil tea plantation communities or Sinhala villages in 40 randomly selected local government

divisions were considered. The study estimated participation in organised social activities using self-reported attendance during the previous year. Multivariable regression analyses were used to explore associations with community and individual factors.

The results of the study indicated low levels of social participation in poor and geographically isolated communities. Also, plantation community elders reported significantly less participation than village elders, specifically in religious attendance. Individual factors with a significant positive association with social participation in the multivariable analyses were being younger, married, male, and in good health condition. Domestic work and cultural constraints frequently prevent older women from attending organised activities. This means that location, gender, marital status, health cultural and domestic activities, and age have effects on social participation.

Mauldin and Narendorf (2018) presented results from a social network analysis of residents of an assisted living facility who passed a cognitive screening in Houston. Exponential random graph models were used to analyse factors connected to friendship networks and acquaintances of residents, such as symptoms of depression, physical limitations, and cognitive functioning.

The study indicated that residents report, on average, 2.8 companions and 11.2 acquaintances. Characteristics of social networks found in the general population (reciprocity and transitivity) also exist within the assisted living facility. Acquaintances are more likely reported by younger residents and between residents with similar physical limitations levels. Also, friendship ties are more likely between residents who live on the same floor of the building.

Thus, the study suggested that location, age, and health have significant effects on social participation.

Shah, Frank and Ehrlich (2020) analysed how vision impairment and other adverse health and disability outcomes impact social participation. The purpose of the study was to evaluate the existing literature on the relationship between vision impairment and social participation. The study conducted desktop research on the impact of vision impairment on social participation. From 18 out of the 19 papers reviewed, the study concluded that vision impairment was associated with reduced social participation. For the quality assessment studies, four (4) studies were appraised as "moderate" and 15 were appraised as "weak." There was a varied disparity in study populations and measurement of vision impairment and social participation. In conclusion, there was a consensus that vision impairment is associated with reduced social participation. This shows that good health has a significant positive effect on the social participation of people.

Mood and Jonsson (2016) analysed whether poverty affects social outcomes - political participation, activities in an organisation, close social relations (social support), and other social relations (relatives and friends). The authors applied Swedish Level-of-Ling longitudinal survey data (2000-2010). The study also compared these effects across five diverse indicators of poverty. The study adopted the logistic regression models to estimate the results. The study concluded that in general, the effect of poverty is negative on social life (social participation).

Also, the study showed that poverty has more harmful effects on relations with friends and relatives than on social support, and more on

political participation than organisational activities. The poverty indicator that showed the greatest impact was material deprivation (lack of cash margin), while the most prevalent poverty indicators - absolute income poverty and especially relative income poverty - appear to have the least effect on social outcomes. This provides that poverty and income status have an effect on social participation.

Turcotte and Gaudet (2013) investigated the informal social participation - helping friends, neighbours, or relatives - of full-time workers in Canada. The study focused on full-time workers who were aged between 25 and 54 years. The study aimed to analyse what factors prompt these workers to make commitments to relatives and friends, and what obstacles hinder them from active social participation. The study examined whether the increase in full-time employment is associated with a decrease in daily social participation rates. The study used data from the 2010 general social survey and the Canada Survey of Giving, Volunteering, and Participating data in 2010 in its analyses. The logistics regression models were used for the analysis. The results indicated that full-time workers are less likely than unemployed people to help relatives and friends. Also, the study indicated that commuting time reduces informal social participation. Females are more likely to volunteer regularly than males. Thus, time to work has a negative effect on social participation and gender also affects social participation.

Jaiswal, Fraser and Wittich (2020) investigated the barriers and facilitators that influence social participation in older adults with dual sensory impairment in Canada. The International Classification of Functioning, Disability, and Health was used to describe environmental and personal

factors that influence the social participation of older adults with these health conditions. The study was conducted using interviews. The data were analysed using a content analysis approach. Environmental factors including access to technology aids, societal attitudes toward disability, and availability of transportation infrastructure emerged as the most important factors influencing participation. In contrast, the inaccessibility of the built environment, the cost, and the limited availability of accessible transportation were crucial barriers to their social participation. This means infrastructure has a positive effect on social participation

Pinto and Neri (2017) conducted a study to investigate the factors that are connected to older adults' low social participation in Brazil. The study adopted a hierarchical logistic regression model and multivariate analysis methods to analyse the data. The study employed data from participants of the Fibra study, consisting of adults aged 65 years and older, living in seven cities in Brazil. The study considered macro-structural, socio-economic, and health conditions of the respondents. The results revealed that low perceived social support, vision impairment, age over 80 years, and other health conditions account for low social participation. With this, the study concluded that socio-economic and health factors are key determinants of social participation.

All these studies give insightful findings about social participation. The effect of unemployment is well articulated and discussed. However, it is evident that the incidence of unemployment is more dominant than the length of unemployment. Thus, the effect of unemployment duration on social participation has not been investigated extensively like the case of unemployment level on social participation. It is believed that unemployment

rates might not give details on how unemployment affects one's social participation. Also, the studies reviewed examined the context of advanced nations, with little focus on developing countries. The context of Ghana is empirically missing. Hence, the present study seeks to fill this gap by analysing the effect of unemployment duration on social participation in Ghana. This is important because the socio-economic structure of the Ghanaian system is different from those of advanced countries.

Chapter Summary

This chapter reviewed both theoretical and empirical literature relevant to the study. The studies reviewed were based on the objectives of this study. The theories reviewed include job search theory, human capital model, neoclassical and human capital theories of migration, and empowerment in participation theory. From the review, it is clear that individuals' characteristics and place of residence have a significant effect on unemployment duration. The chapter also revealed that unemployment duration has effects on both the migration intention of individuals and the social participation of people. Other variables including individual characteristics and locality of residence also have effects on migration intention and social participation.

Notwithstanding the relevance of unemployment duration on migration intention and social participation, the effects of unemployment duration on these two variables in Ghana remain largely unknown. To fill these gaps, this current study distinguishes itself from other related studies by examining individual-specific factors that influence unemployment duration and also the effects of the duration of unemployment on migration intention, and social

participation in Ghana. The next chapter presents the research methods used for the study.

CHAPTER THREE

RESEARCH METHODS

Introduction

This study examines unemployment duration, migration intention, and social participation in Ghana. Specifically, the study explores three areas: one, factors that affect unemployment duration with particular reference to migration status and educational attainment; two, effect of unemployment duration on an individual's migration intention; and lastly, effect of unemployment duration on social participation.

This chapter is devoted to the discussion of the research methods employed in the study. It describes the research design adopted and its justification, study area, population, sample and sampling procedure, research instrument, data collection procedure, and data processing. The chapter also considers the data analysis process such as the econometric models, estimation techniques, and definition and measurement of the variables used. It ends with the limitations of the research methods and the chapter summary.

Research Paradigm

Generally, people attempt to appreciate the world and how it operates from varied perspectives often termed a "paradigm". A research paradigm is fundamentally a benchmark for the conduct of research, which is influenced by a particular ideology or tradition informed by assumptions, values and belief systems, practices, and techniques. It offers an organised method of enquiry (Guba & Lincoln, 1994; Jankowicz, 2005). Rehman and Alharthi (2016) posited that a research paradigm is composed of four essential components: (a) ontology which has to do with the nature of beliefs about

reality (Richards, 2003); (b) epistemology, which emphasises the nature of knowledge and the process of its acquisition and validation (Gall, Gall & Borg, 2003); (c) methodology, described as the strategy, action plan, design or process that influences individual's adoption of research methods (Crotty, 1998); and (d) methods, highlighting the exact mode of data collection and analysis including questionnaires and open-ended interviews (Rehman & Alharthi, 2016).

According to Guba and Lincoln (1994), research activities are normally guided by two basic paradigms: positivism and constructivism. Positivism is anchored on knowledge acquired through data collection such as observations and interpreted in an objective manner (Hovenkamp, 1990). This research paradigm is premised on the assumption that reality exists independently of humans. Hence, the investigator has no direct influence on the data collected, which potentially eliminates any form of normative conjectures from the study (Friedman, 1953). The ontological and epistemological stances of positivism are realism and objectivism respectively. Positivists endeavour to understand cause-effect relationships between variables, and when such relationships are finally established, they can be foretold with certainty at some other time in the future. Positivists are biased towards quantitative research.

On the contrary, constructivism is actually a paradigm that relies on observation and scientific study of how people acquire knowledge. This paradigm maintains that people form their knowledge and appreciation of the world by means of experiencing things around them and reflecting on such experiences. When people experience something new, they have to relate or

reconcile it with what they already know. This may change their belief and make them accept the new information as important or they may discard it as irrelevant, making them the active originators of their knowledge. The implication is that advocates of constructivism strive to build perceptions of human issues based on personal and social experience and they rely on qualitative methods (Guba & Lincoln, 1994). From the perspective of constructivism, individuals resort to their personal experience and exposure in society to make meaning out of a given situation. Constructivism and its qualitative methods of investigation have been criticised as being idiosyncratic, experiential, and prone to value judgment which is a threat to objectivity (Essilfie, 2020; Friedman, 1953).

There is also an approach known as the mixed method utilised by researchers. This approach is a hybrid of positivism (quantitative methods and facts) and constructivism (qualitative methods and personal experiences). It allows a much more detailed investigation of a given phenomenon under study since it adopts both quantitative and qualitative methods of enquiry.

Justification of the Adoption of the Positivist Approach

Considering the objectives of this study, the positivist paradigm is employed. This paradigm is adopted because it maintains that reality is stable and can be observed and described from an independent perspective Levin, 1988). Positivists maintain that only the knowledge obtained by direct observation is factual and trustworthy. Thus, the positivists assert that a knowledge generation process that is not anchored on the positivist philosophy is fundamentally disregarded as scientific and ultimately invalid (Hirschheim, 1985). Consequently, facts acquired through activities such as observing and

measuring are considered objective and valid. Therefore, the investigator relies on facts rather than human interests and subjective opinions.

Positivists organise the knowledge generation process based on quantification, which is crucial to enhance exactness in describing parameters and the discernment of the correlation among them. A positivist approach to research and knowledge is rooted in a real and objective interpretation of the available data. It makes it possible for the researcher to examine social processes more objectively to describe relationships between the variables being investigated. This paradigm allows the use of the quantitative approach to research, which makes it appropriate for the development of mathematical models to explore the relationship between quantitative measurements.

Moreover, positivists mostly adopt quantitative techniques including surveys, structured questionnaires as well as certified statistics from private, national, and international organisations. Positivists stress quantitative approaches such as observation, measurement, reliability, and validity in the process of investigation. The quantitative approach allows the investigator to put the social world into a structure of causality and dissolve the role of human effect through the use of a quantitative instrument such as multivariate statistical analysis in analysing data as employed in this study.

Study Area Description

The study area for this thesis is the Republic of Ghana. Ghana lies on the west coast of Africa, with Cote d'Ivoire to the west and Togo to the east. The country is bordered on the north by Burkina Faso and on the south by the Gulf of Guinea. Ghana has an estimated total land area of 238,537 square km, with about 3.5 percent surrounded by water (Huq, 1989). The country has a

tropical climate, which is warm and dry along the southeast coast, hot and humid in the southwest, and hot and dry in the north.

Ghana's international land boundaries come up to 2,094 km, surrounding the 10 administrative regions of the Western Region, Central Region, Greater Accra Region, Volta Region, Eastern Region, Ashanti Region, Brong Ahafo Region, Northern Region, Upper East Region, and Upper West Region (Killick, 1978). However, in 2018, six new regions were created from four (4) of the 10 regions, giving rise to 16 administrative regions. The Brong Ahafo was divided into three regions – Ahafo, Bono, and Bono East Regions. The North East and the Savannah Regions were carved from the Northern Region. The Oti Region was created out of the Volta Region, while the Western North Region was carved out of the Western Region.

Ghana gained independence within the Commonwealth on March 6, 1957. The country is the first British dependent in Sub-Saharan Africa to achieve independence under majority rule. Ghana became a republic on July 1, 1960, with Dr. Kwame Nkrumah as its First President. The country has experienced diverse forms of governance and constitutional arrangements. Ghana was a sovereign state with a constitution under the British Commonwealth (1957-1960), First Republic (1960-1966), Second Republic (1969-1972), Third Republic (1979-1981), and the Fourth Republic (1992-present).

Ghana, in the past two and half decades, has made significant strides, particularly in areas of democracy and economic growth. The country under its multi-party system, an independent judiciary, media freedom, and robust

growth is fundamentally gaining public and investor trust globally. Ghana has become a beacon of democracy and peace in Africa, following its successful conduct of eight successive presidential and parliamentary elections as well as the growth of press freedom and freedom of speech, in general, since 1992. Ghana became a lower-middle income economy in 2007 on the back of rebasing of its Gross Domestic Product (GDP) in 2010 by the GSS, culminating in an elevated per capita GDP (Kwakye, 2012).

Ghana is essentially an agricultural country. The major agricultural produce includes cocoa, sheanuts, rubber, coffee, cashew, and pineapples. It is also endowed with natural resources such as gold, diamond, bauxite, manganese, and timber (Ahiakpor, 2012; Killick, 1978). However, the country upon the commencement of commercial oil production in 2011, the bulk (43.5%) of its workforce is now engaged in the service sector, 38.3 percent in the agricultural sector, and less than one-fifth (18.2%) in the industry.

Population

In January 2019, the Ghana Statistical Service estimated the population of Ghana at 30.2 million, with an annual intercensal growth rate of 2.5 percent. This represents an increase of about 5.6 million over the 24.6 million recorded in 2010. The 2010 PHC analytical report indicated that there are more females (51.2 %) than males (48.8%) in Ghana. About 38.3 percent of the population are below the age of 15 years, 57 percent are within the working age population (15 – 64 years) and 4.7 percent were aged i.e. 65^{+} years.

On nationality, roughly 98.5 percent of Ghana's population is Ghanaian by birth and 1.5 percent non-Ghanaian. The major ethnic groups in

Ghana include the Akan (52.5%), Mole-Dagbani (13.5%), Ewe (12.8%), Ga-Dangme (8.0%), Gurma (4.9%), Guan (3.7%), Grusi (2.4%) and the Mande (0.9%) (GSS, 2019).

With religious affiliations of the population, there are Christians (74.1%), Muslims (16%), traditionalists (3.5%), and other religions (0.2%), with 6.1 percent representing those without religion (GSS, 2019). English is the official language but the most widely spoken Ghanaian languages are the Akan, Ewe, Hausa, Nzema, and Ga. The four regions (Central, Greater Accra, Brong Ahafo, and Upper East) employed in this study mimic the features/attributes highlighted about the Ghanaian population.

With educational attainment of the currently employed population, aged 15 years and older, almost one-fifth (19.9%) have no education, nearly a quarter (24.7%) have junior secondary/high education, 15.6 percent have only primary education, middle school education (13.8%), while about a little over one-quarter (25.9) have senior secondary or higher education including professional qualifications (GSS, 2019).

The Ghana Statistical Service, based on the GLSS 7 data, estimated the total unemployment rate in Ghana at 8.4 percent. The rate is higher for females (9.2%) than males (7.5%). It is also higher in urban areas (11.4%) than in rural areas (5.2%). Among the currently employed population aged 15 years and older, the majority (53.4%) are engaged as self-employed (self-employed with employee 4.1 percent and self-employed without employee 49.3 percent), 23.5 percent are engaged in paid employment, 16.9 percent work as contributing family workers, 5.2 percent as causal workers and 0.2 percent work as domestic workers. Moreover, about seven (7) out of every 10

of the employed population are engaged in informal enterprises and employment.

Sample and Sampling Procedure

The sample refers to that part of the population selected for the study upon which conclusions will be drawn to reflect the entire population. The sample is necessary because all households or persons in Ghana cannot be studied during the period of this study. For the determination of the sample in this study, a multistage sampling procedure was employed.

In the first place, the then 10 administrative regions of Ghana (now 16 regions) were stratified into two main zones (Northern Zone and Southern Zone) for this study. Each zone was made up of five regions. The Northern Zone comprised Upper West, Upper East, Northern (now Savanna, Northern, and North East), Brong Ahafo (Ahafo, Bono, and Bono East), and Ashanti Regions. The Southern Zone, on the other hand, consisted of the Western (currently Western and Western North), Central, Greater Accra, Volta (Volta and Oti), and Eastern Regions. The rationale behind this procedure was that it would enhance each region's chance of being selected for the study, compared to where four regions are randomly selected out of the 10 regions. It is worth noting that the study is emphasising 10 regions because the GSS 2019 population projection used in the study is based on 10 regions and not the current 16 regions.

Secondly, after the regions had been stratified into the two zones, a simple random sampling technique was adopted to select two (2) regions from each zone, making a total of four (4) regions. Moreover, two (2) districts were selected from each of the four (4) regions, totaling eight (8) districts. Thirty

(30) enumeration areas (EAs) with 632 households were selected from the 8 districts for the study.

The four randomly sampled regions include the Central, Greater Accra, Brong Ahafo, and Upper East Regions and the eight districts include the Cape Coast North Sub-Metro, Agona East District, Ablekuma Central, and Osu Klottey Sub-Metros, Sunyani Municipal, Dorma East District, Bawku Municipal, and Builsa North District, The regions and their respective districts, EA codes, locality names and addresses of the households (including contact numbers of heads of households) were obtained from the Ghana Statistical Service based on the GLSS 7 survey.

To identify and select the unit of analysis (i.e., the individual), a systematic sampling approach was employed and the total sample size chosen for the study was informed by Cochran's (1975) statistical formula stated below:

$$n = \frac{z^2 pq}{d^2} \quad (1)$$

where n is the desired sample size, z is the standard normal deviation evaluated at 1.962, p is the probability of success (employment, evaluated at 91.6%), q is the probability of failure (unemployment, 8.4%) and d is the degree of accuracy expected (10).

$$n = \frac{1.962^2 * 91.6 * 8.4}{10^2} = 29.619 \quad (2)$$

Therefore, the total sample size for the study is specified as:

$$n * 30 = 29.619 * 30 = 888.57 \quad (3)$$

To address the possibility of missing information, 61 additional questionnaires were added to cater for potential non-respondent in the sample.

With this, a total of 950 questionnaires were administered in the four regions, eight districts, and 30 EAs from 632 households. As indicated earlier, the details of the households were obtained from the GSS. Though 950 individual respondents were given the questionnaires, non-response and missing values for some variables reduced the sample to 836. This constitutes a response rate of 88.0 percent.

The sample comprised only persons aged 15 years and above who are active in the labour market, often referred to as the labour force. Thus, individuals below the age of 15 years, persons in full-time studies, and those not working nor searching for jobs were excluded from the study. The sample drawn from each region was influenced by the 2019 population projection by the Ghana Statistical Service, as presented in Table 1.

Table 1: Distribution of sample by region

Region	Population	Sample
Greater Accra	4,887,516	329
Brong Ahafo	2,947,587	187
Central	2,738,351	179
Upper East	1,294,072	141
Total	**11,867,526**	**836**

Source: Adinkra-Darko (2021)

Data Collection Instrument

To collect information to address the objectives of the study, a detailed questionnaire was designed and administered to the respondents in the study regions. The questionnaire was designed in line with the objectives of the study. The variables included in the questionnaire were informed by the literature. Some of the items were adopted from the GLSS 7 questionnaire (a nationally representative survey instrument by the Ghana Statistical Service)

where necessary. The questionnaire was developed by the candidate under the supervision of the supervisors.

The questionnaire was structured under six sections: demographic characteristics of respondents, background information of respondents' parents, employment status, unemployment duration, migration intention, and social participation (Appendix D). The sections of the questionnaire were informed by the objectives of the study.

With the view to achieving accurate and reliable conclusions, much attention was given to the validity and reliability of the instrument and the data. Validity refers to the adequacy of the indicators and instruments employed to measure the variables of interest. In developing the instrument, most of the items and indicators were adopted from the GLSS 7 dataset, a national representative data produced by the Ghana Statistical Service, and the literature. The instrument was vetted and approved by the Principal Supervisor. In addressing the reliability concerns of the data to ensure that the conclusions obtained from the study could be generalised to the population level, adequate attention was paid to the determination of the sample size as well as the sampling approach and its implication for the study. In doing so, a popular sample size determination by Cochran (1975) was utilised.

To further enhance the validity and reliability of the data, the data were cleaned and properly managed to ensure that the statistics produced were efficient, using Statistical Package for the Social Sciences version 21 and Stata version 14 to ensure internal validity. External validity was evaluated by comparing the statistics of the variables with published national statistics such as those produced by the Ghana Statistical Service. To guarantee the reliability

of the instrument and ultimately the data for the study, I pre-tested the instrument in the Cape Coast North Sub-Metro using 60 participants. This was done after the instrument had been approved by the Principal Supervisor. The pilot data were analysed and based on the results, some of the variables were modified to improve the accuracy of the data. The data collection instrument, together with the research proposal, was submitted to the University of Cape Coast Institutional Review Board (UCCIRB) for ethical clearance. All these ensured that the instrument was valid and reliable.

In ensuring ethical standards, a consent form was attached to the questionnaire for the respondents to fill out before responding to the questionnaires. The inclusion of the consent form was to ensure that the respondents were informed about the purpose of the study. It also guaranteed their freedom to withdraw from the study at any time they so wished because their participation was voluntary. No pressure, intimidation, or fear was put on any respondent just to elicit their compliance.

Data Collection Procedures

The data collection exercise commenced after ethical clearance was obtained from the UCCIRB (Appendix E). In all, five months were used for the data collection (February 2020 – June 2020). The questionnaires were administered during the day. On average, 30 – 40 minutes were used to complete a questionnaire with a respondent.

The exercise began with the training of the research assistants (field officers). The study involved 10 research assistants for the data collection. These persons were post-graduate students who had submitted their thesis for assessment. Post-graduate students were employed in this respect because of

their exposure to the field of research. The research assistants were trained purposely for this study's data collection. The candidate traveled across the four study regions to conduct the training for the assistants. The training enabled the candidate to explain the purpose of the study to the assistants and also take them through the individual items on the questionnaire. The research assistants were natives of the study regions. This was to ensure that there was no language barrier between them and the respondents. However, some of the potential respondents declined to participate in the study and their rights were duly respected. In some instances, some of the respondents were not willing to speak to some of the items on the questionnaire.

Data Processing and Analysis

After the completed questionnaires had been received by the candidate from the research assistants across the study regions, the data were entered using SPSS version 21. The data entry, editing, and coding were done by the candidate and lasted for three weeks (15 working days). This made it possible for the candidate to identify questionnaires that were poorly answered, which were subsequently excluded from the study.

As part of the data management, each variable was properly named and labelled for easy identification and use. After the naming and labeling of the variables, the codes were checked, and the recoding of some variables was done where necessary. No name or any form of identification of respondents was required in the data. This was to ensure the anonymity of respondents. The data were further examined to ensure that the variables were normally distributed. Variables that had extreme values were transformed using

logarithms. The analysis of the data was purely quantitative, using Stata version 14.

Analytical Framework of Empirical Objective One: Individual-specific Factors that Influence Unemployment Duration in Ghana

The analysis of the data on the first empirical objective is driven by two theories: the human capital model (Becker, 1974) and the job search theory (Lancaster, 1990; Mortensen, 1986). Within the human capital model, success in the labour market is explained by investments in certain types of individual characteristics including education, training, health, and labour market experience (Becker, 1974; Shumway, 1993). With the job search theory, the motivation behind the modeling of unemployment duration lies in the conditional probability of escaping unemployment, the hazard function (Arulampalam & Stewart, 1995; Kupets, 2006; Shumway, 1993).

The job search model in a typical labour market suggests that for an unemployed person, the expected unemployment duration is influenced by two probabilities: (1) the probability of the person getting a job offer and (2) the probability of the person accepting the offer. Premised on the fact that human beings are heterogeneous, the two probabilities could be affected by an individual's specific traits. Undoubtedly, the chance of the unemployed receiving a job offer may be determined by a myriad of factors that make the job seeker more attractive or otherwise to the prospective employer. These factors may include the employed person's level of education, age, gender, and, in some cases, the labour market experience. The probability of the unemployed accepting the job offer, however, may be affected by his reservation wage which is potentially determined by factors like the existence

and level of social support, including unemployment compensation, expected distribution of wage offers, and search cost.

The analysis here focuses on the first research question: "What individual specific factors influence unemployment duration in Ghana?". It also evaluates the joint effect of educational attainment and migration status on the duration.

Generally, the choice of an estimation technique is influenced by the type of dataset employed for the analysis. Duration data, therefore, requires a different statistical analysis from (other) quantitative data due to their nature and particularities (Danacica & Babucea, 2010). The probability of leaving unemployment status to employment has an instantaneous risk of occurring; hence, it is unreasonable to assume normality (Cleves, William, Gould, Roberto & Gutierrez, 2004).

Econometric Model Specification and Estimations

This study applied survival analysis to uncensored data of 575 completed spells in four regions – Central, Greater Accra, Brong Ahafo, and Upper East – to analyse the length of time it takes an unemployed person to find employment. In this study, the respondents were asked the retrospective question, "how long it took them to transit from unemployment to employment", rather than a longitudinal study where participants are followed over time to determine the length of time that they stayed unemployed, which is mostly associated with censoring. This implies that the study employed cross-sectional data.

Survival analysis is, basically, about how to model time to an event. In this study, the focus is to model the waiting time for employment

(unemployment duration) for the unemployed. In this survival analysis, the study estimates the functions of the elapsed time between the entry into unemployment and the exit to employment.

Assuming T is a random variable denoting time, f(t) is defined as the probability distribution function on the random variable, and F(t) is the cumulative distribution function with F(t) = Pr {T< t). The survival function S(t) is, therefore, modelled mathematically as follows:

$$S(t) = \Pr\{T > t\} = 1 - F(t) = \int_t^{\infty} f(x)dx \quad (4)$$

Following equation (4), the hazard function is defined as the instantaneous rate of event occurrence (transition from unemployment state to employment) and it can be written mathematically as:

$$h(t) = \lim_{dt \to 0} \frac{\Pr\{t \leq T < t + dt / T > t)}{dt} \quad (5)$$

where *h(t)*, the hazard rate, is the instantaneous rate at which the unemployed individuals exit the unemployment state to employment over the time period *t* to *t* + *dt*, *T* is a non-negative random variable representing the duration between the onset of unemployment and the exit to employment, and *t* is the realization of *T*. The associated conditional probability function can be specified as:

$$h(t) = \frac{f(t)}{S(t)} \quad (6)$$

where the *f(t)* denotes the density function of duration in unemployment before the exit to employment, and *S(t)*is the survival function. From equation (6), the density of completed unemployment spells can be obtained as:

$$f(t) = h(t)S(t) \quad (7)$$

where *S(t)* is the survival function which refers to the probability of surviving the unemployment spell till the last time, *t*.

The nature of the survival curve offers important information on how fast the sample population transits to employment from the unemployment state. However, since the focus of the study is to explore the effect of more than two explanatory variables on the duration, the application of the hazard function is deemed most suitable (Shumway, 1993). The hazard functions allow for the determination of the risk associated with the event occurrence after a time *t* has elapsed for individuals surviving up to time *t*. Such functions are, particularly, convenient because they allow for the modelling of equations that relate the hazard rate to the independent variables. Moreover, hazard functions are necessary, especially when the intention is to generate parameter estimates and make conclusions on the impacts of independent variables on the hazard rate.

Survival analysis takes the form of non-parametric, semi-parametric, and parametric models. The choice of a particular survival model is dependent on the assumptions developed about the nature of the hazard function (Cleves, et al., 2004). With the non-parametric (Kaplan Meier estimator and Nelson Aalen methods) and the semi-parametric (Cox Proportional hazard) models, estimates are computed using the observed data and do not assume anything about the distribution of failure times, also known as the baseline hazard (Nonyana, 2015). The parametric model (Normal, Uniform, Exponential, Weibull, and lognormal), however, involves parameterisation of the hazard function.

In this study, the semi-parametric Cox proportional hazards model is utilised. This model was advocated by Cox in 1972 as an approach to model the relationship between survival time and covariates (Cleves et al., 2004). The rationale behind the use of Cox regression is to examine variables that influence the hazard rate (Danacica & Babucea, 2010). The Cox proportional hazards model has the advantage of incorporating sample design characteristics including complex survey design (Boudreau & Lawless, 2006). Analysing data with complex design features calls for a statistical technique that considers the design features, since failure to acknowledge complex design factors biases estimates of the standard error (Nonyana, 2015).

This model is also adopted for the study on two counts: One, the study does not make any assumption about the functional form of the hazard (baseline hazard) and the distributional function of the data is not known unlike the parametric models; and two, it involves multivariate analysis, unlike the non-parametric model that focuses on univariate analysis. Thus, the non-parametric analysis does not model the effects of explanatory variables on the hazard. Therefore, the effect of independent variables on hazard rate is computed by Cox regression. The Cox model is regarded as a partially parametric model with the general form specified below:

$$h(t_i|x_i) = h_0(t_i)\exp(X_i^T\beta) \quad (8)$$

where $h_0(t_i)$ represents a base-line hazard function that captures the unobserved effect of time on the hazard rate; β denotes a (row) vector of coefficients to be estimated; and X_i is a (column) vector of regressors.

A Cox regression model comprising potential determinants is fitted to examine the effects of socio-demographic variables on waiting time for

employment. The degree of the relation is determined using the estimates of the hazard ratios. The coefficients β in equation (8) are estimated by maximising the partial likelihood function specified by Collett (2003) as:

$$L(\beta) = \pi_{i=1}^{N}[\frac{h(t_i|x_i)}{\Sigma_{j=1}^{N} Y_j h(t_i|x_i)}]^{\sigma i} \quad (9)$$

where t_i represents the failure time of the ith person/unit for $t_1, \ldots, t_N$; σ_i = 1 if the ith unit is an observed failure, and 0 if the ith person is actually censored; and

$Y_j(t) = 1\ if\ t \leq t_j, and\ 0\ if\ t > t_j$.

Although the semi-parametric models do not assume anything about the functional form of the hazard, the Cox proportional model makes proportional hazards (constant relative hazards) between two categories. Thus, the Cox proportional hazards assumption states that the hazards of two observations are proportional. Mathematically, the Cox proportional hazards assumption is written considering two observations with covariate value X_i and X_j with a ratio of their respective hazards as:

$$\frac{h(t_i X_i)}{h(t_i X_j)} = \frac{h_0(t_i)\exp(X_i)\beta x}{h_0(t_i)\exp(X_j)\beta x} = \exp\left[\beta x\left(X_i - X_j\right)\right] \quad (10)$$

It is worth noting that the latter part of the equation (10) i.e. exp [βx(X_i - X_j)] is not time (t_i) dependent, signifying the proportionality of the two hazards.

Diagnostic Test: Testing of Proportional Hazards Assumption

Model diagnostics are indispensable in regression analysis to ensure the non-violation of the assumption(s) of a particular model of interest. As alluded to earlier, the Cox proportional hazards model has the assumption that the hazards of two observations are proportional (i.e., the null hypothesis is that proportional hazards exist). Schemper (1992) posits that the comparative

risk of covariates with non-constant hazard ratios is either underestimated or overestimated, subject to the direction of change.

The log-minus-log plots and Schoenfeld residuals are commonly used approaches for testing the proportional hazards assumption (Nonyana, 2015). However, Schoenfeld residuals are mostly preferred to the log-minus-log plots, since the former is not dependent on time (Bellera, MacGrogan, Debled, de Lara, Brouste & Mathoulin-Pélissier, 2010). The log-minus-log plots, according to Schemper (1992), are misleading due to their non-reaction to the structure of data. Accordingly, the test of proportional hazards assumption in this study is done using the Schoenfeld residual test.

In conducting the Schoenfeld residual test, proportionality is examined, focusing on p-values and a graphical display. The residual test estimates weighted and scaled Schoenfeld residuals by fitting a Cox model. The weighted Schoenfeld residuals used to compute the p-values and the scaled residuals are plotted for a graphical test. Schoenfeld residuals for explanatory variables x_k, k =1,.. ,z, and observation j are explained as the difference between the explanatory variable x_{kj} and the mean of the other persons in the risk set, weighted by their estimated relative hazard (Cleves et al., 2004; Nonyana, 2015). The Schoenfeld residuals are modeled as follows:

$$r_{kj} = X_{kj} - \frac{\Sigma_{ieZ_j} X_{kj} \exp(X_i \widehat{\beta} x)}{\Sigma_{ieZ_j} \exp(X_i \widehat{\beta}_x)} \qquad (11)$$

where Z_j = risk set (subject at risk of failure, in this case, the unemployed individuals).

The Schoenfeld residual-based test also assumes homogeneity of variance across risk sets. It is appropriate when the proportional hazards assumption test is conducted on each explanatory variable in the model

separately, especially for instances where the assumption is violated. As a rule of thumb, for the proportionality assumption to hold, the covariates must have insignificant p-values at the five percent level (p-values that are bigger than 0.05). For the general model, the p-value for the global test must be insignificant for the proportionality assumption to be valid.

The graphical method is adopted to explore the slope of the scaled Schoenfeld residuals subject to time. A graphical display is suitable when the study has no proposition about the form of the non-proportionality (Grambsch & Therneau, 1994). Schoenfeld (1982) maintains that plots clustering around zero presuppose that the proportionality assumption holds. The assumption is, however, violated when the plots exhibit a non-random pattern against time.

Based on equation (8), the empirical specification for the non-interaction and interaction models can be written as equations (12) and (13) respectively:

$$h(t|x)_i/undur_i = h_0 \exp[\beta_{1age_i} + \beta_2 agesq_i + \beta_3 lrwage_i + \beta_4 hsize_i + \beta_5 male_i + \beta_6 single_i + \beta_7 urban_i + \beta_8 snet_i + \beta_9 alt\_income_i + \beta_{10} migrant_i + \beta_{11} education_i + \varepsilon_i] \quad (12)$$

$$h(t|x)_i/undur_i = h_0 \exp[\beta_{1age_i} + \beta_2 agesq_i + \beta_3 lrwage_i + \beta_4 hsize_i + \beta_5 male_i + \beta_6 single_i + \beta_7 urban_i + \beta_8 snet_i + \beta_9 alt\_income_i + \beta_{10} migrant_i \# education_i + \varepsilon_i] \quad (13)$$

Where *undur* represents unemployment duration, *age* is the age of respondents in completed years, *agesq* is squared of age, *lrwage* denotes log of reservation wage, *hsize* means household size, *male* is the sex of respondents, *single* captures the marital status, *urban* is the locality of residence, *snet* denotes whether respondents have social networks or not, *alt_income* means access to

alternative income while unemployed, *migrant* is migration status, and education represents the educational attainment of respondents.

Description and Justification of Variables for Empirical Objective One

Unemployment duration

Unemployment duration refers to the waiting time to transit from the state of unemployment to employment. It emphasises how long an unemployed person (someone who is without a job and searching for one and/or available for work) stays on unemployment. It is measured as the number of months an individual stays unemployed. Long unemployment duration has devastating effects on the victims of unemployment (Doiron & Mendolia, 2012; Kunze & Suppa, 2017).

Age

Age means the age of respondents in competed years. The age of a person influences the probability of employment, hence the duration of unemployment (Dănăcică, 2015; Rahman et al., 2019). Young people are mostly faced with challenges including inadequate experience and expertise, low education, and inadequate social capital than adults which increase their risk of unemployment. Again, some studies (Baah-Boateng, 2015; Haynes et al., 2011) have established that unemployment decreases with age. This implies young people will suffer a longer unemployment duration than adults.

Agesq

Agesq is the square of the age of respondents. This implies that the relationship between age and unemployment duration is non-linear (Shumway, 1993). The presence of the agesq allows for the determination of the threshold

(turning point) at which the linear relationship between age and unemployment duration ends or flips.

Reservation wage

Reservation wage is the lowest wage rate at which a job seeker will accept a given job offer. It is an important factor affecting unemployment duration. The job seekers will fail to accept any wage offers lower than their reservation wage. A higher reservation wage, therefore, is expected to prolong unemployment duration and a lower reservation wage will shorten the duration, all other things held constant.

Household size

The number of persons living in a house affects an individual's unemployment duration. Persons who live in a large household might experience a longer unemployment duration especially if they are not the head of the household since they may have somebody to provide for their needs unlike where the job seeker lives alone and will have to bear all expenses personally. Household size is expected to increase unemployment duration.

Sex

The sex of individual influences the likelihood of unemployment and the duration of unemployment (Bairwa & Sharma, 2019). Men have a higher instantaneous hazard rate to employment and a shorter unemployment duration than women (Dănăcică, 2012). The implication is that females will experience longer unemployment duration than their male peers.

Marital status

The marital status of a person affects their employability and the attendant unemployment duration. Holding all other factors constant, married

people are expected to have a shorter unemployment duration than those who are single (Nonyana, 2015), particularly when their spouses are working. In this case, the unemployed spouse can get funding for their job search from the employed spouse which increases the probability of employment (Shumway, 1993).

Locality

An Individual's place of residence can affect unemployment duration. Urban residents stand a higher risk of prolonged unemployment duration than their rural peers, largely due to high unemployment rates in urban areas.

Social network

Social networks such as having mentors, relatives, and friends, belonging to old student associations, fund clubs, religious groups, and political groups, and involvement in voluntary services can significantly influence unemployment duration. Unemployed persons with good social networks often have higher probabilities of employment than those who have little or no social networks (Marek et al., 2016). Accordingly, unemployed persons who have good social networks are expected to have a shorter unemployment duration than those without social networks.

Alternative income

Access to alternative income sources while unemployed potentially determines an individual's unemployment duration. Just like persons who receive unemployment compensation tend to experience longer unemployment duration, unemployed individuals who receive financial assistance from friends, relatives, church members, and club members among others are expected to record longer unemployment duration than their colleagues who

do not receive any such financial support. Such unemployed persons often tend to relax in their job search and/or have a higher reservation wage, hence a longer unemployment duration.

Migration status

Migration allows persons to move from areas with low demand for labour to places with high demand for labour. It increases opportunities in life including employment and job opportunities. A migrant, as applied in this study, is a person who has moved from his/her community of origin to settle, either temporarily or permanently, in a new community in search of a job. Migrants are usually exposed to many employment opportunities that are practically missing in their communities of origin (Bernard & Pelikh, 2019). The migrant's exposure to employment opportunities increases the probability of finding a job. It is expected that migrant job seekers will experience a shorter unemployment duration than their non-migrant counterparts.

Educational attainment

A person's success in the labour market is impacted by investments in one's human capital including education and training. The level of education is one significant factor influencing unemployment duration (Rahman et al., 2019). Levels of education as an indicator of human capital positively influence labour market outcomes such as employment (Shumway, 1993). Persons with higher levels of education are expected to have shorter unemployment duration since they tend to be associated with higher probabilities of employment. Nonyana (2015) maintained that persons with at least tertiary education have higher hazard rates (shorter unemployment duration).

Summary of the Variable Description for Empirical Objective One

The summary of the variable description for objective one is presented (Table 2). The adoption of these variables was informed by theory and literature.

Table 2: Summary of the variable description for objective one

Variable	Definition and Measurement	A-priori Signs
Age	Age of respondent in completed years (continuous)	-
Agesq	Square of age (continuous)	+
Rwage	Reservation wage: the lowest wage rate at which an individual is willing to accept a given job offer (continuous)	-
Hsize	Household size (continuous)	+/-
Male	Sex of respondent (Dummy: Male=1; Female=0)	+
Single	Mar ital status of respondent (Dummy: Single =1; Married=0)	-
Urban	Locality of residence (Dummy: Urban=1; Rural=0)	-
Sent	Respondent having social networks (Dummy: Yes=1; No=0)	+
Alt_income	Access to alternative income sources (Dummy: Yes=1; No=0)	+/-
Migrant	Migration status (Dummy: Migrant=1; Non-migrant=0)	+/-
Education	Educational attainment (categorical: No education=1; Basic=2; Secondary=3; Certificate/Diploma/HND=4; Higher/ tertiary=5)	+

Source: Adinkra-Darko (2021)

Analytical Framework of Empirical Objective Two: Effect of Unemployment Duration on Migration Intention

For a better understanding, the study assumes that there are only two locations: host and destination. The host location is denoted by 1 and the destination location is represented by 0. The study analyses the intention to migrate or not for an individual in the destination location (0). Assume $U_j(t)$ is the expected utility obtained from residing in location *j*, where *j=0,1* in year t. Assume further that the cost of movement from the destination location (0)

to the host location (1) is C_{01}(measured in utility terms), and ρ is the rate of time preference.

If $\rho = 0$, it means the individual is indifferent, whether they receive the benefit now or future. A positive ρ value (ρ >0) implies that the person prefers a benefit/payment now than in the future; hence, a cedi today is valued more than a cedi tomorrow. The study introduces the rate of time preferences because flows are utility terms. The present value of living in a location is just the discounted streams of utility flows received over the lifetime. Given that the length of life is denoted by *T*, the expected present value of residing in the destination location (0) is specified as:

$$PV_0 = \sum_{t=0}^{T} \frac{U_0(t)}{(1+\rho)^t} \quad (14)$$

The expected present value of migrating to the host location (1) is given as:

$$PV_1 = \sum_{t=0}^{T} \frac{U_1(t)}{(1+\rho)^t} - \bar{C}_{01} \quad (15)$$

The study also assumes that the cost of moving from the destination location (0) to the host location (1) occurs only in the first period.

The decision rule is that the individual would choose the location that maximises lifetime utility. Thus, move from location 0 to 1 if:

$$NPV_{01} = \sum_{t=0}^{T} \frac{U_1(t)}{(1+\rho)^t} - \sum_{t=0}^{T} \frac{U_0(t)}{(1+\rho)^t} - \bar{C}_{01} > 0$$

$$= \sum_{t=0}^{T} \frac{U_1(t) - U_0(t)}{(1+\rho)^t} - \bar{C}_{01} > 0 \quad (16)$$

From equation (16), it is noticed that migration decisions depend on net utility flows. A person may migrate on the back of a poor current situation, U_0 is low, hence push factor(s) or U_1 may be high, presenting pull factors.

For purposes of generalisation, utility flows can vary across locations for a number of basic factors including, but not limited to, personal, economic, socio-cultural, political and environmental factors. It is easy to observe that this generalises from one alternative location to many. Assume there are *J* locations, then, the decision rule will be specified as:

Selection location: $\max(PV_0, PV_1, \ldots, PV_J)$. This framework presumes individual choices and, thus, represents voluntary decisions on migration by individuals and households.

In terms of theoretical orientation, the second objective of the study aligns itself with the neoclassical theory of migration and the human capital theory of migration (Sjaadstad, 1962). The basic framework of the neoclassical theory demonstrates that in the economic development process, migration is the product of actual wage gaps across countries, territories, societies, and markets due to varying degrees of labour market rigidities (Harris & Todaro, 1970; Hicks, 1932; Lewis, 1954).

Hence, migration decision is influenced by variations in returns to labour across societies and markets. The theory also considers migration as the outcome of geographical disparities between labour demand and labour supply which exist at various levels (De Haas, 2010; Kurekova, 2011). Thus, the resultant wage disparities drive workers to migrate to scarce labour and high-wage societies from excess labour and low-wage societies. Therefore, migration helps to redistribute labour, employment opportunities, and earnings across societies and markets, which is contrary to the movement of capital between markets.

In a full employment situation, the neoclassical theory of migration forecasts the existence of a linear association between wage variations and migration (Bauer & Zimmerman, 1999; Borjas, 1994; Kurekova, 2011). In an advanced neoclassical analysis of migration, the intention to migrate is influenced largely by predicted rather than actual earnings where the earnings are weighted by the likelihood to secure a job (Massey et al., 1993).

The human capital theory of migration complements the neoclassical theory of migration at the micro-level framework (Todaro, 1969). Thus, the human capital theory of migration enhances the neoclassical model by bringing on board individual socio-demographic attributes such as age, gender, education, experience, skills, and abilities as essential covariates of migration (Bauer & Zimmerman, 1999; De Haas, 2010; Kurekova, 2011). The implication, therefore, is that in the human capital theory of migration, factors including education, skills, experiences, preferences, and expectations significantly influence intentions to migrate.

The theory assumes that individuals migrate to areas with highest predicted net monetary yields on their human capital (Hochleithner & Exner, 2018; Todaro, 1976). Also, the chance of a person to migrate generally increases with the level of education but diminishes with age (Bauer & Zimmerman, 1999). The theory also posits that all other things remaining constant, migrants tend to be fairly high-skilled since migration enhances their probabilities of accomplishment including employment, hence shorter unemployment duration.

Given this, the theoretical model of migration has been specified in this study based on an extended neoclassical migration model and the human

capital theory of migration. The independent variables represent the unemployment duration, individual differences between regions, and other independent variables that can be considered to be "push and pull" factors (Hejdukova & Kurekova, 2020). The general form of the equation for the theoretical model of migration intention can be expressed as follows:

$$\text{mgr} = f(undur, educ, pb\_wage, mpov, hsize, loc, age, com, snet, mstat, sex, infrast)$$

where *mgr* is migration intention, *undur* is the duration of unemployment, *educ* denotes educational attainment of respondents, *bwage* is perceived better wage elsewhere, *mpov* is respondent's desire to mitigate poverty, *hsize* is household size, *loc* is locality of residence, *age* is the age of the respondent, *com* is consideration of cost of migration, *snet* is social networks, *mstat* is marital status, *sex* is the sex of respondent, and *infrast* is access to infrastructural facilities, which is an index generated through the principal component analysis (PCA) as discussed below.

The Multidimensional Measure of Infrastructure Cut-off/Threshold

The five indicators that were used to generate infrastructure through the PCA can be grouped into energy – access to electricity; education – access to educational facilities; health – access to a healthcare facility; water – access to potable water; and road infrastructure – access to good roads. Since infrastructure must sum up to one, applying equal weights gives the relative contribution of each of these five dimensions as: $\frac{1}{5} = 0.2$. In the context of multi-dimension, a respondent must be deprived of at least two dimensions. Hence, the multidimensional cut-off is ≥ 0.4. This is represented by a binary random variable Y_i that takes the value of one if the household is identified as multidimensional infrastructure poor and zero if otherwise, as follows:

$$Y_i = \begin{cases} 1 \; if \; MPI \geq 0.4 \\ 0 \quad\; MPI < 0.4 \end{cases} \tag{17}$$

The outcomes of this binary variable occur with a probability π_i which is a conditional probability on the explanatory variables. For an individual i to be identified as multidimensional infrastructure poor, this is represented as:

$$\pi_i \equiv \Pr(Y_i) \equiv \Pr(Y_i | X_i) \tag{18}$$

and thus, the conditional mean equals the probability as follows:

$$\mu Y_i | X_i = \pi_i \times 1 + (1 - \pi_i) \times 0 = \pi_i.$$

Model Specification for Migration Intention

Here, the study is interested in assessing the probability that an individual would have migration intention or not while in a state of unemployment. The type of econometric estimation technique used in this analysis is the probit estimation technique. Since the dependent variable on the determinants (migration intention = 1, and 0 if otherwise) is discrete and binary rather than continuous, linear estimation techniques (e.g. Ordinary Least Squares – OLS or Linear Probability Model - LPM) yield biased results. Linear estimation techniques may yield a negative variance of the error term and the probabilities may lie outside the reasonable range of between zero and one. Therefore, the Maximum Likelihood Estimation (MLE) techniques (e.g., Probit and Logit) which are binary response models are appropriate to quantify the factors influencing the individual aspirations to migrate or not (Cameron & Trivedi, 2010; Peprah, Oteng, & Sebu, 2020). Probit and logit models yield quantitatively similar results where $\hat{\beta}_{logit} = 1.6\hat{\beta}_{probit}$ when the data are centered on the mean (Amemiya, 1981). However, this analysis employs the probit model.

The Econometric Model Specification for Migration Intention

The probit model mainly estimates the effect of unemployment duration (*undur*) on migration intention, which is a binary dependent variable. This is represented by a binary random variable Y_i that takes the value of one (1) if the individual has migration intention (*mgr*) and zero (0) if otherwise, as follows:

$$Y_i = \begin{cases} 1 \ \ if\ mgr > 0 \\ 0 \ \ otherwise \end{cases} \quad (19)$$

Migration is mostly a choice rather than imposition (except for instances like a natural disaster, war and political refugees) and, thus, the choice model fits this study. Consider a model with a binary outcome, $mgr_{i,}$ denoting whether an individual has migration intention (1) or not (0):

$$mgr_i = \gamma\omega_i + \mu_i \quad with\ mgr_i = \begin{cases} 1\ if\ mgr > 0 \\ 0\ \ otherwise \end{cases} \quad (20)$$

$$P_r(mgr_i = 1|\omega) = \Pr(mgr_i * > \ 0)$$

$$= \Pr(\omega i'\beta + \mu_i > 0|\omega) \quad (21)$$

$$= \Pr(\mu_i > -\omega i'\beta) \quad (22)$$

Where $\mu_{i \sim i.i.d\ N(0,\sigma^2)}$

$$P_r(mgr_i = 1|\omega) = -\phi\left(-\frac{\omega'\gamma}{\sigma}\right), \sigma = 1 \quad (23)$$

$$P_r(mgr_i = 1|\omega) = \phi\left(\frac{\omega'\gamma}{\sigma}\right), \sigma = 1 \quad (24)$$

where ϕ represents the standard normal distribution, ωi is a matrix representing determinants of mgr, ω_i is a vector of individual and location characteristics that may influence the decision to migrate, γ *is* the vector of parameters to be estimated, and μ_i is the error term. Therefore, without the loss of generality of equation (20), equation (25) expands the scope of

consideration for what contributes to the migration intention of individuals. The empirical probit model for the study is stated as:

$$mgr_i = \beta_0 + \beta_1 undur_i + \beta_2 \text{educ}_i + \beta_3 p\text{b\_wage}_i + \beta_4 \text{mpov}_i + \beta_5 \text{hsize}_i + \beta_6 \text{loc}_i + \beta_7 \text{age}_i + \beta_8 \text{com}_i + \beta_9 snet_i + \beta_{10} mstat_i + \beta_{11} \text{Sex}_i + \beta_{12} infrast_i + \varepsilon_i \quad (25)$$

As indicated earlier, *mgr* is migration intention or not, *undur* is unemployment duration, *educ* denotes educational attainment of respondents, *pb_wage* is perceived better wage elsewhere, *mpov* is desire to mitigate poverty, *hsize* is household size, *loc* is the locality of residence, *age* is the age of respondents, *com* is consideration of the cost of migration, *snet* is social networks, *mstat* is marital status, *sex* is the sex of respondents, and *infrast* is access to infrastructural facilities.

Description and Justification of Variables for Empirical Objective Two

Migration intention

Migration intention is about whether or not individuals have aspirations to migrate because they are unemployed. It is measured as a dummy variable, where we have one (1) if individuals have migration aspirations due to unemployed, and zero (0) if they do not have migration aspirations.

Unemployment duration

The number of months an individual stays unemployed can influence migration intentions. As one stays unemployed for several months, one may consider traveling to another place with the expectation of finding a job. This may also be due to a mismatch of skills in a particular town or community, therefore relocating to another community could enhance the job search

outcome. Most of the time, people who migrate find jobs. Hence unemployment duration has a positive effect on migration intention. Fackler and Rippe (2016) concluded that unemployment has a statistically significant positive effect on the propensity to migrate. This propensity increases the longer the waiting time.

Educational attainment

People who have acquired higher levels of education might have higher intentions and aspirations to migrate than those with little or no education (Migali & Scipioni, 2018). Most educated people migrate from their communities of origin to settle in other communities due to the lack of or inadequate job opportunities that will match their skills. Some people have intentions to migrate, purposely, to seek higher education which is mostly not attainable in their communities. In Ghana, most people have acquired higher education as an outcome of migration since they could not have access to higher educational institutions in their respective communities. This then suggests that the intention to migrate is positively influenced by levels of education (Shuttleworth, Östh & Niedomysl, 2017).

Perceived better wage elsewhere

Individuals who perceive better wages elsewhere are more likely to have migration aspirations than those who do not have this perception. Intention to migrate is influenced principally by predicted rather than actual earnings, where the earnings are weighted by the likelihood of securing a job (Massey, et al., 1993). Empirically, there are pieces of evidence of people pulled to migrate to cities by better income prospects. As a result, people who

have a perception of a better wage elsewhere are expected to have higher probabilities of migration intention.

Desire to mitigate poverty

Poverty negatively affects the quality of life and people are always working hard to avoid being poor. Most people often believe that they can improve upon their circumstances when they migrate, especially those in rural areas. Thus, some people think that migrating to other places might help them mitigate poverty. People with a strong desire to mitigate poverty tend to have a higher tendency of migration intention than those without such desire.

Household size

Household size is an important factor affecting the migration aspiration of people, especially household heads and married couples. Large households are less likely to have migration intentions compared to small households due to inconveniencies associated with movement from one geographical area to another. It is often more convenient for a small household to migrate than a large household. As a result, house size is expected to have a negative effect on migration intention, holding all other factors constant.

Locality

The place of residence can influence the migration aspirations of people. Urban areas usually have good economic and social infrastructure such as institutions of higher learning, healthcare facilities and services, good transport system and road networks, electricity, potable water, entertainment areas, and improved technology that make life comfortable for the urban residents but are mostly lacking in rural areas. Moreover, income levels are higher in urban areas than in rural areas. Poverty levels are significantly higher

in rural areas relative to urban areas. The implication of these disparities between rural and urban areas is that rural residents tend to have higher tendencies of migration intentions than their peers in urban areas.

Age

Age influences people's migration aspirations. Generally, young people are more curious and adventurous and have strong desires to migrate than adults. The quest for higher education and training among young people, for example, heightens their migration intentions. The effect is that migration intentions decrease with age, therefore young people will have higher probabilities of migration intentions than older people (Bernard & Pelikh, 2019; Dao et al., 2018; Foster, 2017).

Consideration of cost of migration

Careful consideration of the cost of migration often affects people's migration decisions. The cost of migration in this context comprises the monetary cost, the risks, and the opportunity cost of migration that migrants will have to bear. Being mindful of the cost of migration enhances migration preparation and increases the potential migrant's mental toughness. All other things being equal, individuals who consider the cost of migration are expected to have a higher likelihood of migration intentions than those who do not consider it.

Social network

Social networks can affect one's migration intention in different ways depending on the source (internal or external) of the network. If a person's source of social network is outside his/her community of residence, the

probability of migration intention is expected to be high. However, if the source is within, the probability of migration intention will be low.

Marital status

People who are married, particularly women, are less likely to migrate to other places compared to those who are single. Shuttleworth, Östh and Niedomysl (2017) argued that marital status has a significant effect on people migrating from one place to the other. Usually, married couples take decisions together. As a result, a spouse cannot take migration decisions without the consent of their partners. This can affect their intentions to migrate compared to persons who are not married and would not require the consent of any other person before deciding to migrate or not. Marriage is expected to reduce the migration aspirations of people, especially women.

Sex

Generally, men and women have varying desires regarding migration. Men are more adventurous and have a higher desire to migrate than women. Abraham, Bähr and Trappmann (2019) indicated that there is a persistent gender difference even after controlling for other variables to make migration decisions. Females are expected to have low tendencies of migration intention than males.

Infrast

Infrast, referred to as infrastructure, is an index created from five variables – access to electricity, access to educational facilities, access to healthcare facilities, access to potable water, and access to good roads - through the principal component analysis. All other things being equal, improved access to infrastructure in our local communities is expected to

lower the migration aspirations of people. One's satisfaction with the prevailing living standard is associated with a lower probability of intention to migrate (Migali & Scipioni, 2018). There is a negative relationship between infrastructural development and migration intentions.

Summary of the Variable Description for Empirical Objective Two

The summary of the variable description for objective two is presented (Table 3). These variables were adopted for the study based on theory and literature.

Table 3: Summary of the variable description for objective two

Variable	Definition and Measurement	A-priori Signs
Mgr	Migration intention due to unemployment duration (Dummy: Yes=1; No=0)	
Undur	Unemployment duration – months of unemployment (continuous)	+
Edu	Educational attainment (categorical: No education=1; Basic=2; Secondary=3; Certificate/Diploma/HND=4; Higher/tertiary=5)	+
Pb_ wage	Perceived better wage elsewhere (Dummy: Yes=1; No=0)	+
Mpov	Desire to mitigate poverty (Dummy: Yes=1; No=0)	+
Hsize	Household size (continuous)	-
Loc/rural	Locality of residence (Dummy: Rural=1; Urban=0)	+
Age	Age of respondents in completed years (continuous)	-
Com	Consideration of cost of migration (Dummy: Yes=1; No=2)	+/-
Sent	Having social networks (Dummy: Yes=1; No=0)	+/-
Mstat/married	Marital status of respondent (categorical: Married=1; Never married=2; Separated/divorce=3; Widow=4)	+/-
Sex	Sex of respondent (Dummy: Female=1; Male=0)	+/-
Infrast	Access to infrastructural facilities (continuous)	-

Source: Adinkra-Darko (2021)

Following equation (25), the empirical probit estimations for the partial models of gender and locality are specified in equations (26) and (27) respectively as:

Gender Model: Female/Male

$$mgr_{ij} = \beta_0 + \beta_1 undur_i + \beta_2 \text{educ}_i + \beta_3 bwage_i + \beta_4 \text{mpov}_i + \beta_5 \text{hsize}_i + \beta_6 \text{loc}_i + \beta_7 \text{age}_i + \beta_8 \text{com}_{i_i} + \beta_9 snet_i + \beta_{10} mstat_i + \beta_{11} infrast_i + \varepsilon_i \quad (26)$$

Where j= 1, 2. (1=Female, 2=Male)

Locality Model: Rural/Urban

$$mgr_{i,h} = \beta_0 + \beta_1 undur_i + \beta_2 \text{educ}_i + \beta_3 bwage_i + \beta_4 \text{mpov}_i + \beta_5 \text{hsize}_i + \beta_6 \text{age}_i + \beta_7 \text{com}_i + \beta_8 snet_i + \beta_9 mstat_i + \beta_{10} \text{Sex}_i + \beta_{11} infrast_i + \varepsilon_i \quad (27)$$

Where h= 1, 2. (1=Rural, 2=Urban).

Justification of Gender and Locality Analysis

Gender and locational analyses of the effect of unemployment duration on migration aspirations are worthwhile in the sense that waiting time for employment might have different effects on males and females regarding migration. The effect might also vary from urban areas to rural areas due to differences in the characteristics of the areas. Undoubtedly, males and females might be influenced differently by a given set of push and pull factors of migration. The same could be said about urban and rural residents. Therefore, the disaggregated analyses based on gender and locality are appropriate in investigating the effect of unemployment duration on migration intention in Ghana.

Selection of Average Marginal Effect

There are three ways of calculating marginal effects. These include: (a) Marginal Effects at Averages (MEA): this is at the average point of each

variable; (b) Average Marginal Effects (AME) means averaging all the slopes for individuals; and (c) Marginal Effect at Representative Value (MER), that is computing at specific values. This is a special case of MEA. In this study, AME is interpreted because averaging the dummy variables in MEA will not be meaningful. The AME is calculated as:

$$AME = \frac{1}{n}\sum_{i=1}^{n}\frac{\partial E(L_i|\omega)}{\partial \omega_i} = \frac{1}{n}\sum_{i=1}^{n}[\lambda(\beta'\omega_i) * \beta_i] \quad (28)$$

Where n is the number of individuals.

Analytical Framework of the Third Empirical Objective: Effect of Unemployment Duration on Social Participation

On the effect of unemployment duration on social participation, the analysis is conducted within the locus of the empowerment in participation theory which hypothesises that empowerment and participation are intimately associated to the extent that they complement each other to offer a better meaning, understanding and purpose (Holcombe, 1995). The theory argues that empowerment emanates from participation in thinking, decision-making process, planning, acting, monitoring, and evaluating (White, 1981). In this context, participation is regarded as the involvement in activities that provide opportunities for interactions with others in society. Effective participation promotes collective action, including an inclusive decision-making process, while empowerment promotes control sharing, entitlement and capacity to participate, and the ability to exercise influence in decision-making (Claridge, 2004).

Model Specification for Social Participation

The focus of this section of the study is to assess the probability that an individual gets involved in activities that provide opportunities for interaction with others in society (social participation). The type of econometric estimation technique employed here is the probit. Since the dependent variable, social participation, is discrete and binary (social participation = 1, 0 if otherwise), and not continuous, linear estimation techniques like OLS or LPM would give biased results and negative variance of the error term, where the probabilities may fall outside the reasonable range of between zero and one.

As a result, the MLE techniques such as the Probit and Logit which are binary response models are considered suitable to model the factors that affect an individual's social participation (Cameron & Trivedi, 2010). Probit and logit models generate quantitatively similar results where $\hat{\beta}_{logit} = 1.6\hat{\beta}_{probit}$ when the data are centered on the mean (Amemiya, 1981). In this analysis, the probit model is adopted.

The Econometric Model Specification of Social Participation

The probit model captures the estimation of the effect of unemployment duration (*undur*) on social participation, which is a binary dependent variable. This is represented by a binary random variable Y_i that takes the value of one (1) if the individual is involved in social participation (*spat)* and zero if otherwise, as follows:

$$Y_i = \begin{cases} 1 \ \ if \ spat > 0 \\ 0 \ \ otherwise \end{cases} \qquad (29)$$

Following equations (20) - (24) and model (29), the full empirical model for social participation is written as:

$$\text{spat}_i = \beta_0 + \beta_1 undur_i + \beta_2 \text{hstat}_i + \beta_3 \text{nch}_i + \beta_4 \text{educ}_i + \beta_5 \text{lab}_i + \beta_6 \text{Sex}_i + \beta_7 \text{age}_i + \beta_8 \text{loc}_i + \beta_9 lincome_i + \beta_{10} \text{estat}_i + \beta_{11} mstat_i + \beta_{12} \text{reg}_i + \varepsilon_i \quad (30)$$

Where *spat* denotes social participation, *undur* represents unemployment duration, *hstat* is perceived or self-rated health status, *nch* is the number of children with ages less than 10 years, *educ* is the educational attainment of respondents, *lab* refers to the type of labour, *sex* is the sex of respondents, *age* is the age of respondents measured in completed years, *loc* is respondents' locality of residence, *lincome* is the log of income where average monthly expenditure is used as a proxy for income, *estat* represents employment status of respondents, *mstat* refers to marital status, *reg* denotes the region of residence of respondents, and ε is the error term.

Description and Justification of Variables for Empirical Objective Three

Social participation

Social participation, as applied in this study, refers to a person's engagement in activities that create opportunities for interaction with others in society. These include religious, cultural, political, sporting, voluntary, recreational, clubs and associations, educational, and community-based activities. It is measured as a dummy, where we have one (1) if individuals engage in one or more activities, and zero (0) if otherwise.

Unemployment duration

Unemployment affects income levels, especially in societies where support for the unemployed is lacking or inadequate. The implication is that victims of unemployment could be subjected to poverty and other forms of

hardship the longer the duration of unemployment. Moreover, unemployment and the associated income loss often preclude people from engaging in many activities that create opportunities for interaction with others. Unemployment inflicts a strong negative effect on social participation (Brand & Burgard, 2008; Dieckhoff & Gash, 2015; Gundert & Hohendanner, 2015; Kunze & Suppa, 2020b). The observed negative effect of unemployment on social participation is strengthened, the longer the waiting time for employment.

Perceived/Self-rated good health

Good health is an indispensable factor in social participation (Mehrotra & Bail, 2018). People who perceived themselves to be of good health status are more likely to have social participation than their peers who are not healthy, holding all other factors constant (Ahmad & Hafeez, 2011; Marsh et al., 2018; Shah, Frank & Ehrlich, 2020).

Number of children

The number of children (below the age of 10 years) influences social participation. Children under the age of 10 years, usually, are supposed to be taken care of by their parents since they cannot care for themselves. Such parental care for kids affects the availability of parents to socially participate, especially women. The number of children is expected to harm social participation.

Levels of education

Education affects the level of social participation (Ahmadvand & Sharifzadeh, 2012). Campbell (2006) argued that there is a strong positive relationship between education and social participation. Therefore, individuals

with higher educational levels will have better social participation than those who have lower levels, since their avenues for interaction are many.

Type of labour

With the type of labour, we mean whether the person is skilled or unskilled. Type of labour is quite related to levels of education since skilled labour involves training, education, and the use of more mental efforts than physical; while unskilled labour requires little or no education, training, and the use of more physical strength than mental. Skilled persons usually have better social participation because they tend to have higher incomes than their unskilled colleagues.

Income

Income is proxied by an average monthly expenditure of respondents since most people are not willing to comment on their actual income or earnings. Income levels influence the degree of social engagement and interactions of people (Mood & Jonsson, 2016). Higher-income levels provide the necessary conditions for individuals to socially participate. There is a positive social participation effect of income (Marsh et al., 2018). Individuals with higher income levels are expected to have better social participation than those with low income.

Sex

Individuals' sex can affect their social participation (Ahmad & Hafeez, 2011; Mehrotra & Bail, 2018; Turcotte & Gaudet, 2013). Males have higher tendencies toward social participation than females, particularly married women. Domestic work and cultural constraints frequently prevent most

women from attending organised activities (Marsh et al., 2018). Generally, females will have a lower probability of social participation than males.

Age

Young people are more likely to engage in activities that create opportunities for interaction with others than older people. Ageing conditions of adults including family responsibilities and ill-health often reduce their interests and abilities to socially participate. Older people are associated with lower social participation (Pinto & Neri, 2017).

Locality

Urban residents have a higher likelihood of social participation than rural dwellers. The basic ingredients for social participation such as schools, sporting activities, religious activities, entertainment centres, clubs and associations, access to transport and technological aids, employment opportunities, and income are more common in urban than rural areas. The implication is that people residing in rural areas will have lower social participation than their peers in urban areas.

Employment status

Among the status of employment, paid employees are less likely to socially participate than those in the other categories of employment like the self-employed (with or without employees), and the others (contributing family members and casual workers). The paid employees are mostly full-time workers who have limited time for other engagements in society, hence low social participation (Turcotte & Gaudet, 2013).

Marital status

Marital status can affect one's engagement in activities that create opportunities for interaction (Ahmad & Hafeez, 2011; Marsh et al., 2018). Married people are expected to have a higher probability of social participation than those who are single. However, among married people, women tend to have lower social participation than men due to domestic work and cultural limitations.

Region of residence

Urbanised regions are more prone to social participation than non-urbanised regions due to the presence of opportunities that create avenues for social participation. Urbanised regions usually have several activities that aid social participation than the non-urbanised. Of the study regions, residents in Greater Accra Region are expected to have a higher probability of social participation than the other regions, all other things being equal.

Summary of the Variable Description for Empirical Objective Three

This section provides the summary of the description of variables used for the analysis of the third objective of the study. Table 4 captures the summary of the variable description.

Table 4: Summary of the variable description for the third objective

Variable	Definition and Measurement	A-priori Signs
Spat	Involvement/engagement in activities that provide opportunities for interactions with others in society. (Dummy: Yes=1; No=0)	
Undur	Unemployment duration – months of unemployment (continuous)	-
Hstat	Perceived/self-rated good health status (Dummy: Yes=1; No=0)	+
Nch	Number of children below age 10 years (continuous)	-
Educ	Educational attainment (categorical: No education=1; Basic=2; Secondary=3; Certificate/Diploma/HND=4; Higher/tertiary=5)	+/-
lab	Type of labour (Dummy: Unskilled=1; Skilled=0)	+/-
Sex/female	Sex of respondent (Dummy: Female=1; Male=0)	-
Age	Age of respondent in completed years (continuous)	-
Loc/rural	Locality of residence (Dummy: Rural=1; Urban=0)	-
Income	Income level proxied by average monthly expenditure (Continuous)	+
Estat	Employment status (categorical: paid employee=1; self-employed with employee=2; self-employed without employee=3; other=4)	+/-
Mstat	Marital status of respondent (categorical: Married=1; Never married=2; Separated/divorce=3; Widow=4)	+/-
Region	Administrative Region of respondent (Categorical: Central =1; Greater Accra=2; Brong Ahafo=3; Upper East=4)	+/-

Source: Adinkra-Darko (2021)

In line with equation (30), the partial empirical gender and locality models for social participation are specified in equations (31) and (32) respectively as:

Gender Model: Male/Female

$$\text{spat}_{ik} = \beta_0 + \beta_1 undur_i + \beta_2 \text{hstat}_i + \beta_3 \text{nch}_i + \beta_4 \text{educ}_i + \beta_5 \text{lab}_i + \beta_6 \text{age}_i + \beta_7 \text{loc}_i + \beta_8 income_i + \beta_9 estat_i + \beta_{10} mstat_i + \beta_{11} \text{reg}_i + \varepsilon_i \quad (31)$$

Where k=1,2. (1=Male, 2=Female)

Locality model: Urban/Rural

$$\text{spat}_{iz} = \beta_0 + \beta_1 undur_i + \beta_2 \text{hstat}_i + \beta_3 \text{nch}_i + \beta_4 \text{educ}_i + \beta_5 \text{lab}_i + \beta_6 \text{sex}_i + \beta_7 \text{age}_i + \beta_8 income_i + \beta_9 \text{estat}_i + \beta_{10} mstat_i + \beta_{11} \text{reg}_i + \varepsilon_i \quad (32)$$

Where z=1,2. (1=Urban, 2=Rural)

Justification of Gender and Locational Analysis

Just like the reasons provided under the second objective on migration intention, gender and locational analyses of the effect of unemployment duration on social participation are necessary because unemployment duration could have different effects on males and females in many respects including social participation. Similarly, the effect of unemployment duration in rural areas might not be the same for urban dwellers since the two areas are structurally, economically, and socially different. Consequently, the gender and locational analyses are considered apt in examining the effect of unemployment duration on social participation.

Post Diagnostic Test

For the estimates to be efficient and consistent, the error term (ε) must be normally distributed. This ensures that the estimates from the multiple regression models are robust, consistent, and efficient. To test for this, a goodness-of-fit test and link test for the probit regression model specifications are performed. The hat-squared should not be significant for the model to be correctly specified. The goodness-of-fit should not be significant for the model to be a good fit. In addition, multicollinearity and correlation matrix are also performed (Appendices A-C). The variables should not be highly correlated with each other. Correlation below five is recommended.

Chapter Summary

This chapter detailed the research methods employed for this study. The research design was first described and the positivist approach to research was adopted. The sample and sampling procedure, data collection instrument, data collection procedures, and data processing analysis were demonstrated. The theoretical and empirical estimation techniques were highlighted in relation to the objectives of the study. The chapter described in detail the survival analyses (semi-parametric Cox proportional hazards models) that were utilised in the unemployment duration analyses, while probit model estimation techniques were specified for the migration intention and social participation analyses. Definitions and measurements of the variables used in the study were adequately provided. Also, post-estimation tests of the model specification were conducted to help in choosing the appropriate estimation techniques.

In terms of possible limitations, a study of this nature requires the use of data with a nationwide coverage but this thesis employed data from four selected regions out of 10 (now 16 regions). Again, survival analysis is best done with longitudinal data so that the study participants can be followed over time to determine their survival times and hazard rates but in this study, cross-sectional data is employed. The study also considers migration decisions as individual voluntary decisions rather than household choices and something that could be forced such as during wartime, natural disasters, and/or political refugees. Moreover, since individuals are mostly not willing to provide information on their earnings and incomes, the study employs the average monthly expenditure of the respondents as a proxy for monthly income to

analyse the effect of income on social participation instead of information on actual income.

These limitations, however, have less impact on the outcome and robustness of the study in the sense that similar studies (Barrera-Osorioa & Bayona-Rodríguez, 2019; Kong & Jiang, 2011; Lyu et al., 2019) have utilised data from a few regions, provinces or institutions but produced robust results, conclusions, and generalisations. Again, several authors and scholars including Rahman, Khan and Jamal (2019), Dănăcică (2015), and Kisto (2014) have done survival analyses using cross-sectional data and also obtained efficient and consistent results. Moreover, expenditure has been used to proxy income with time-tested findings in different studies. These limitations also offer important grounds for further studies in this area. The next chapter presents the socio-demographic characteristics of the respondents and the descriptive statistics of the variables used.

CHAPTER FOUR

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS AND DESCRIPTIVE STATISTICS OF VARIABLES

Introduction

The focus of the study required that individuals aged 15 years and older are studied based on their labour market participation. This chapter gives a brief description of the background information of the respondents and the descriptive statistics of variables employed in the study. As indicated in the previous chapter, the study employed 836 respondents from four (4) regions across the country, but the analysis utilised a 575 sample. This is because the analysis was limited to individuals who have transitioned from unemployment state to employment. Therefore, the descriptive and the summary statistics have a total sample of 575 as presented later in the chapter.

Basic Characteristics of the Respondents

This section presents the basic characteristics of the study respondents. Table 5 highlights background information of the respondents such as age, sex, marital status, region and locality of residence, religious affiliation, educational attainment, educational programme studied at school, housing arrangement, employment status, migration status, and ethnicity. Of the 836 persons studied, the majority (46.5%) are within the ages of 25-34 years old. This is followed by the age group 35-44 years, representing 23.4 percent of the respondents. Individuals between the ages of 15-24 years, 45-59 years, and 60 years and older constitute 16.3 percent, 10.7 percent, and 3.1 percent respectively of the sample. The share of age category (60+ years) is the least

because persons within this group are mostly not actively involved in the labour market (retirees).

More than half (57.9%) of the respondents are males and 42.1 percent are females. These proportions are also an indication of the high labour force participation rate among males than females. In terms of marital status, most of the respondents (46.5%) have never married, 42.5 percent are married, 6.5 percent are divorced/separated, and 4.6 percent are widowed.

The study covers four (4) administrative regions: Central, Greater Accra, Brong Ahafo, and Upper East. As indicated in Table 5, about 39.4 percent of the respondents are in the Greater Accra Region, 22.4 percent in Brong Ahafo Region, 21.4 percent in Central Region, and 16.9 percent in the Upper East Region. These percentages mirror their respective shares of the regional population in the national population. Considering the rural-urban distribution of the respondents, 78.1 percent are urban residents and 21.9 percent reside in rural areas.

Moreover, Table 5 shows the religious affiliations of the respondents. Ghanaian society is a secular one, with the majority being Christians. Most of the respondents are Christians, forming about 72.7 percent. This is in line with the report of the 2016/2017 Ghana Living Standard Survey round seven (GLSS 7) which established that about 74.2 percent of the household heads interviewed were Christians. The next largest religious group among them is Muslims who constitute 21.9 percent. Traditionalists and other forms of religion represent 3.2 percent and 2.3 percent respectively. Meanwhile, all the different religious bodies coexist peacefully. Again, the study sample comprises more migrants (53.6%) than non-migrants (46.4%).

Table 5: Basic characteristics of respondents

Variable	Frequency	Percent (%)
Age distribution		
15-24	136	16.27
25-34	389	46.53
35-44	196	23.44
45-59	89	10.65
60+	26	3.11
Sex		
Male	484	57.89
Female	352	42.11
Marital status		
Never married	389	46.53
Married	355	42.46
Divorced/separated	54	6.46
Region		
Central	179	21.41
Greater Accra	329	39.35
Brong Ahafo	187	22.37
Upper East	141	16.87
Locality		
Urban	653	78.11
Rural	183	21.89
Religion		
Christianity	607	72.69
Islam	183	21.92
Traditional	27	3.22
Other	19	2.27
Migration status		
Migrant	448	53.59
Non-migrant	388	46.41
Educational attainment		
No Education	88	10.53
Basic	168	20.10
Secondary	244	29.19
Cert/Dip/HND	137	16.39
Higher	199	23.80
Educational Programme studied		
Business	147	19.65
Science	44	5.88
Gen. Arts	120	16.04
Voc/Tech/Com	110	14.71

Table 5 Cont'd

Education	100	13.37
Humanities	67	8.96
Biological science	22	2.94
Physical science	10	1.34
Agric. Science	10	1.34
Other	118	15.78
Housing arrangement		
Owner occupied	157	18.78
Family house	235	28.11
Rented house	366	43.78
Live with someone	78	9.33
Employment		
Yes	575	68.78
Paid employee	*290*	*50.43*
Self-employed with employee	*84*	*14.61*
Self-employed without employee	*119*	*20.70*
Contributing family worker	*29*	*5.04*
Casual work	*50*	*8.70*
Other	*3*	*0.52*
No	261	31.22
Number of observations (N)	836	100.00

Source: Adinkra-Darko (2021)

On educational attainment, as presented in Table 5, an estimated 29.2 percent of the respondents have secondary education, followed by tertiary education (23.8 percent), basic education (20.1 percent), certificate, diploma or HND qualifications (16.4 percent), and no education (10.5 percent). This means that about 31 percent of the respondents have educational qualifications lower than secondary education.

Among the 748 respondents who have educational qualifications, about one-fifth (19.7%) studied Business-related courses, 16.0 percent studied General Arts (those with secondary education), Vocational, Technical and Commercial (14.7%), Education (13.4%), Humanities (9.0%), secondary education Science (5.9%), Biological Sciences (2.9%), Physical Sciences

(1.3%), Agricultural Science (1.3%), and those with other fields of study including basic education qualification (15.8%). Generally, the respondents with Science, Education, and Technical, Vocational Education and Training (TVET) constitute 26.2 percent, with varying levels of educational attainments and qualifications.

The housing ownership situation of the respondents is also captured in Table 5. Considering housing arrangements, 43.8 percent live in rented facilities, 28.1 percent reside in family houses, 18.8 percent occupy their own houses whereas 9.3 live with others including employers and friends.

Focusing on employment and employment status, 575 (68.8%) are in employment or have some work to return to after some period such as leave vacation, and 271 (31.2%) are unemployed and jobless. Among the employed respondents, 50.4 percent are paid employees, 20.7 percent are self-employed without employees and 14.6 percent are self-employed with employees. Roughly, 8.7 percent work as casual workers and 5.0 percent as contributing family workers.

Ethnicity of Respondents

The study covers individuals with diverse socio-cultural backgrounds. Table 6 establishes that majority of the respondents are Akan (45.9%). This is consistent with the results of the GLSS 7 which indicated that 52.5 percent of household heads surveyed were Akan. The Akan group is predominantly in the Central (60.9%), Greater Accra (53.2%), and Brong Ahafo (52.4%) relative to the Upper East (1.14%). The significant component of the Akan group in the Greater Accra Region could be attributed to migration since Accra (the National Capital and Regional Capital) is the host for most

migrants in the country. Ewes constitute 8.7%, followed by Ga Dangme (8.3), Mande (5.4%), More-Dagabni (5.0%), Grusi (4.7%), Gurma (2.8%), and Guan (2.4%). The respondents that belong to other ethnic groups represent 16.9 percent.

Table 6: Distribution of respondents by ethnicity and region

	Central		Greater Accra		Brong Ahafo		Upper East		Total	
Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Akan	09	60.9	175	53.2	98	52.4	2	1.4	384	45.9
Ga-Dangme	9	5.0	55	16.7	5	2.7	0	0.0	69	8.3
Ewe	19	10.6	42	12.8	11	5.9	1	0.7	73	8.7
Guan	10	5.6	10	3.0	0	0.0	0	0.0	20	2.4
Gurma	2	1.1	19	5.8	2	1.1	0	0.0	23	2.8
More-Dagabni	8	4.5	13	4.0	14	7.5	7	5.0	42	5.0
Grusi	9	5.0	10	3.0	8	4.3	12	8.5	39	4.7
Mande	7	3.9	4	1.2	34	18.2	0	0.0	45	5.4
Other	6	3.4	1	0.3	15	8.0	119	84.4	141	16.9
Total	179	100	329	100	187	100	141	100	836	100

Source: Adinkra-Darko (2021)

Summary Statistics of Continuous Variables

The summary statistics of the continuous variables used in the estimations are presented in Table 7. *Age* measured in completed years has a maximum value of 67 years and a minimum of 17 years with a mean of 34 years, indicating quite a youthful population. Reservation wage (*rwage*) records a mean of Gh₵1,495.25 with maximum and minimum values of Gh₵10,000.00 and Gh₵100.00 respectively and a standard deviation of Gh₵1,320.04. This means, on average, people would accept available job offers when the pay offer is at least Gh₵1,495.25. Household size (*hsize*), the number of persons living in a household, has a mean of five (5), a minimum of one (1), and a maximum of 16 with a standard deviation of three (3).

The average number of children below the age of 10 years (*Nch*) is about two (2) children, with a minimum and a maximum number of children being 0 and 15 respectively, and a standard deviation of about three (3).

Unemployment duration (*Undur*), measured as the number of months an individual stays unemployed (waiting time for employment), averages one year and five months (17 months), with a standard deviation of 18 months. The values of the duration range from 1 month to 144 months. This implies that on average, an individual declared unemployed and jobless could remain unemployed for approximately one and half years in Ghana. The monthly income, proxied by average monthly expenditure, ranges from a Gh₵50.00 minimum to Gh₵8,000.00 maximum, with an average of Gh₵961.37 and a standard deviation of Gh₵914.53. Infrastructure (*Infrast*), which is an index created through the PCA, has a mean of -0.16, minimum of -0.94, maximum of 1.06, and standard deviation of 0.98.

Table 7: Summary statistics of continuous variables

Variable	Observations	Mean	Std. Dev.	Minimum	Maximum
Age	575	34.70783	9.650054	17	67
Rwage	575	1,495.252	1,320.038	100	10000
Hsize	575	5.013913	2.622566	1	16
Nch	575	1.878261	1.972581	0	15
Undur	575	16.74435	18.06065	1	144
Income	575	961.3739	914.5257	50	8000
Infrast	575	-0.16014	0.97796	-0.94368	1.05853

Note: Std. Dev. represents standard deviation.
Source: Adinkra-Darko (2021)

Descriptive Statistics of the Categorical Variables

This section provides the descriptive statistics of the categorical variables used in the analyses and estimations. These are presented based on

the thematic areas: unemployment duration, migration intention, and social participation.

Following the first empirical objective, which examines covariates of unemployment duration in Ghana, Figure 5 shows the distribution of unemployment duration by region and place of residence. With an average unemployment duration of 1 year and 5 months (17 months), among the four regions studied, Upper East has the longest duration of about 3 years (36.7 months), with Central recording the shortest of about 1 year (11.8 months). The duration is longer in Greater Accra, with about 2 years (23 months), and in Brong Ahafo about 1 year, 2 months (14.3 months). This suggests that unemployed persons in the Upper East and Greater Accra Regions have a higher probability of staying much longer in unemployment than those in the other regions. This could be explained by the limited availability of job opportunities in the Upper East Region, and the high influx of rural-urban migrants in the Greater Accra Region looking for non-existing jobs, relative to the other regions.

For the place of residence, the statistics show that unemployment duration is longer in urban areas (about 1 year and 10 months – 21.9 months) than in rural areas (about 1 year and 4 months – 15.8 months). These statistics presuppose that areas with higher unemployment rates are associated with longer unemployment duration, holding all other factors constant.

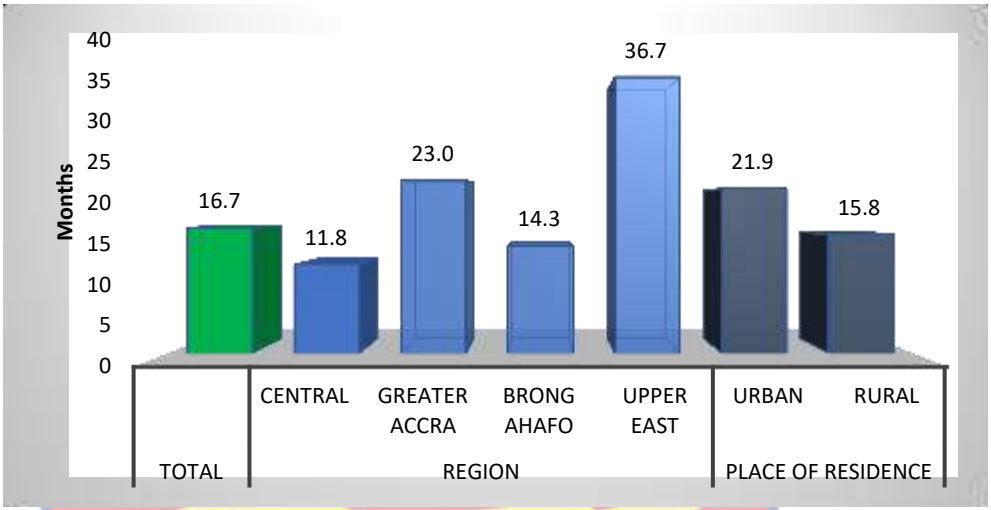

Figure 5: Average unemployment duration by region and locality of residence
Source: Adinkra-Darko (2021)

The distributions of unemployment duration by sex, marital status, and access to alternative income while unemployed are depicted in Figure 6. It is observed that the unemployment duration for those who are single (never married, divorce/separated and widow) is relatively shorter (about a year and 4 months – 16.3 months) than that of those who are married (1 year and 5 months – 17.3 months). Also, the unemployment duration for males (1 year and 4 months -16 months) is shorter than that of females which is about 1 year and 6 months (17.8 months). Thus, unemployment duration for females is about 2 months higher than that of their male counterparts. Moreover, unemployed persons who have access to alternative income (financial support) because they are unemployed are associated with a longer unemployment duration, about one and half years (18.4 months), compared to their peers without such support who recorded about one year and three months (14.6 months) unemployment duration.

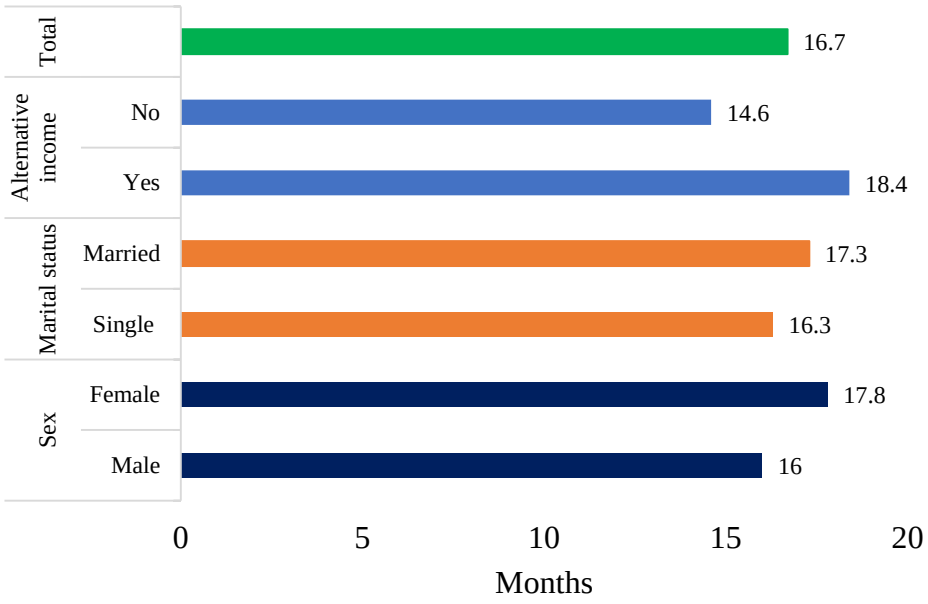

Figure 6: Average unemployment duration by sex, marital status, and access to alternative income
Source: Adinkra-Darko (2021)

Considering the distribution of unemployed duration by educational attainment and migration status, individuals with basic education have the longest duration of unemployment (about 1 year and 9 months – 21.3 months), while those with tertiary/higher educational qualifications have the least duration (about 1 year and 1 month – 13.3 months). Individuals who have a secondary education are associated with a relatively longer duration (1½ years -18 months) than their peers with certificate, diplomat or HND qualifications (about 1 year and 5 months – 16.7 months). Those without education have a duration of about one year and two months (13.9 months). Among those with educational qualifications, it is observed that as the level of educational attainment increases from basic through to tertiary education, the duration of unemployment decreases (Figure 7).

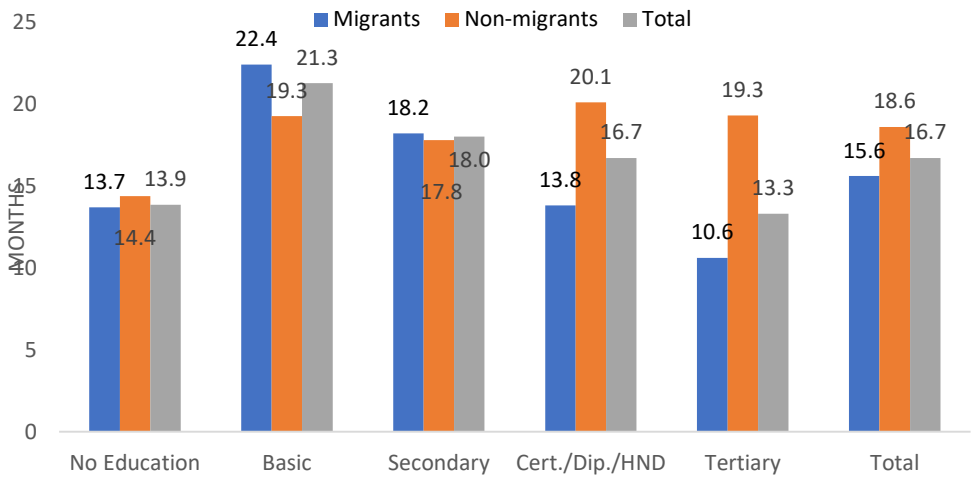

Figure 7: Average unemployment duration by educational attainment and migration status
Source: Adinkra-Darko (2021)

This could be explained by the fact that with higher levels of education, one can read and write, think critically and also acquire requisite skills that are needed by employers or enable them to succeed in the labour market. Thus, keeping all other things constant, improved educational attainment increases an individual's chances of receiving job offers. This is consistent with job search theory models (Lancaster, 1990; Mortensen,1986) and the human capital theory (Becker, 1964).

Generally, the duration of unemployment is shorter for migrants (about 1 year and 4 months – 15.6 months) compared to their non-migrant peers (about 1 year and 7 months – 18.6 months). Migration potentially increases an individual's chances of exiting unemployment since those who migrate are mostly exposed to more opportunities as well as competition in the labour market. Also, migration allows individuals to move from excess-labour areas to scare-labour areas with the ultimate outcome of employment (De Haas, 2010; Kurekova, 2011), particularly international migration. Moreover, many people often accept certain job offers if they are outside their community but

will reject the same offer if it is in their community. For example, the kind of jobs most Ghanaian migrants do in other countries, they would not accept to do same jobs if they were in Ghana.

Again, it could be seen from Figure 7 that tertiary education qualification holders who are migrants experience comparatively shorter duration (less than 1 year – 10.6 months) than their non-migrant colleagues (about 1 year and 7 months – 19.3 months). Likewise, individuals with certificate, diploma or HND qualifications who have migrated tend to have a shorter waiting time for employment (about 1 year and 2 months – 13.8 months) relative to those with the same qualification and remain in their communities (about 1 year and 8 months – 20.1 months). However, for those with lower educational attainment such as basic and secondary education, migrants tend to suffer longer duration than their non-migrant counterparts. With those who have no educational qualification, migrants record a shorter duration (13.7 months) relative to their non-migrant peers (14.4 months).

The descriptive statistics of the variables used for the analysis of the second objective, which examines the effect of unemployment duration on migration intention are presented in Table. It throws light on the background and migration intention issues such as sex, educational attainment, locality, marital status, social network, perceived better wage elsewhere, considerations of cost of migration and the desire to mitigate poverty. Of the 575 sample employed for the analysis, there are more males (58.6%) than females (41.4%). Out of the 337 males, 62.9 percent report intention to migrate and 37.1 percent have no migration intentions. Among the 238 females, 60.1

percent indicate an intention to migrate while 39.9 percent report no migration intentions.

On educational attainment, out of the 575 respondents studied, 28.2 percent have higher education, followed by secondary education (22.6%), basic education (21.4%), certificate, diploma or HND qualification (17.9), and no education (9.9%). Of those who have a higher education, 64.2 percent indicate migration intentions, and 35.8 percent otherwise. Out of the secondary education qualification holders, 65.8 percent answers affirmative whilst 34.6 percent reports no migration intention.

For those with basic education, about 61.0 percent report intention to migrate while 39.0 percent have no such intentions. Among the certificate, diploma or HND holders, 68.0 percent and 32.0 percent indicate migration intentions and no migration intentions, respectively. Finally, out of those with no educational qualification, 36.8 percent intends to migrate, with 63.2 percent reporting no intentions to migrate. It can be deduced from Table 8 that migration aspiration is higher among persons with educational attainments than those with no education.

Considering the locality of the respondents, Table 8 suggests that the majority (84.3%) are urban residents while 15.7 percent live in rural areas. Of those who reside in the urban areas, 62.7 percent report intentions to migrate and 37.3 percent have no migration intentions. Of those in the rural areas, 56.7 percent are associated with migration intentions, and 43.3 percent are without any intention to migrate.

Most of the respondents (45.6%) are married, never married (41.7%), divorced/separated (7.8%), and widowed (4.9%). There is an existence of a

statistically significant difference among persons who are never married (74.2%), married (56.9%), divorced/separated (40.0%), and widowed (35.7%) regarding migration intentions.

Regarding social networks, nearly two-thirds (65.6%) indicate they have social networks while 34.4 percent indicate no social networks, and the difference is statistically significant. Of those who have social networks, about 56.5 percent report intentions to migrate, with 43.5 percent signaling no consideration of migrating. On the other hand, 71.7 percent of those without social networks have migration intentions relative to 28.3 percent without migration intentions. The implication, therefore, is that social networks influence migration aspirations.

For the perception of better wages elsewhere, the majority (81.7%) indicate that they perceive better wages elsewhere while 18.3 percent do not perceive any better wages elsewhere, with a statistically significant difference. Of those who perceive better wages elsewhere, 71.1 percent have migration intentions and 28.9 percent have no intention to migrate, whereas for those without any perception of better wages elsewhere, 80 percent report no aspirations to migrate.

Table 8: Descriptive statistics of independent variables for migration intentions

Variables	Frequency (n)	Percent (%)	Migration Intention		X^2, *p*-value
			Yes (%)	No (%)	
Sex					0.470, 0.493
Male	337	58.61	62.91	37.09	
Female	238	41.39	60.08	39.92	
Educational attainment					17.821, 0.001
None	57	9.91	36.84	63.16	
Basic	123	21.39	60.98	39.02	
Secondary	130	22.61	65.38	34.62	
Cert/dip/hnd	103	17.91	67.96	32.04	
Higher	162	28.17	64.20	35.80	
Locality					1.162, 0.281
Urban	485	84.35	62.68	37.32	
Rural	90	15.65	56.67	43.33	
Marital status					35.352, 0.000
Never married	240	41.74	74.17	25.83	
Married	262	45.57	56.87	43.13	
Divorced/separated	45	7.83	40.00	60.00	
Widowed	28	4.87	35.71	64.29	
Social network					12.728, 0.000
Yes	377	65.57	56.50	43.50	
No	198	34.43	71.72	28.28	
Perceived better wage elsewhere					94.739, 0.000
Yes	470	81.74	71.06	28.94	
No	105	18.26	20.00	80.00	
Consideration of cost of migration					54.332, 0.000
Yes	308	53.57	75.65	24.35	
No	267	46.43	45.69	54.31	
Desire to mitigate poverty					53.055, 0.000
Yes	344	59.83	73.84	26.16	
No	231	40.17	43.72	56.28	

Source: Adinkra-Darko (2021)

A statistically significant difference exists regarding the consideration of cost of migration, Table 8 further shows that 53.6 percent of respondents are of the view that they consider cost of migration while 46.4 percent maintain they do not consider cost of migration. Out of those who consider cost of migration, 75.7 percent indicate migration intentions. For those who do

not consider cost of migration, the study reveals that while 45.7 percent have migration intentions, 54.31 percent do not have such intentions.

Last but least, on the desire to mitigate poverty, Table 8 reveals that 59.8 percent of the respondents report in the affirmative and 40.2 percent indicate no desire to mitigate poverty. Among those with a desire to mitigate poverty, 73.8 percent have migration intentions while 26.2 percent are without intentions of migrating. Moreover, of those who have no desire to mitigate poverty, 43.7 percent have migration intentions and 56.3 percent have no intentions to migrate.

The descriptive statistics of independent variables of social participation are shown in Table 9. Out of the sample of 575 respondents used in the analysis, there are more males (58.6%) than females (41.4%). Of the male population, 68.6 percent indicate participation in social activities while 31.5 percent indicate non-participation. Of the females, 61.3 percent involve in social activities that create opportunities for interaction in society while 38.7 percent indicate no social participation.

Regarding educational attainment, 28.2 percent have attained tertiary educational qualifications, followed by 22.6 percent with secondary education, 21.4 percent with basic education, 17.9 percent with certificate, diploma or HND qualifications and 9.9 percent have no educational qualification. Of those with tertiary education qualifications, 70.4 percent indicate social participation and 29.6 percent report otherwise. Among those who have secondary education, 60.8 percent reveal that they participate in social activities whilst 34.6 percent indicate they do not socially participate. Out of the persons who have basic education, 67.5 percent indicate involvement in

social activities. For those who have attained certificate, diploma or HND qualifications, 61.2 percent and 38.8 percent report social participation and no social participation respectively. Also, out of those who have no educational qualification, 66.7 percent participate in social activities.

Addressing social participation with respect to the locality of residence among respondents, Table 9 further indicates that 84.4 percent reside in urban areas and 15.7 percent in rural areas. Of those who reside in urban areas, 65.2 percent report in the affirmative their participation in social activities while 34.8 percent indicate no social participation. For those who dwell in rural areas, 67.8 percent report social participation and 32.2 percent have no social participation.

Again, most of the respondents (46.3%) are in Greater Accra Region, followed by Central (25.9%), Brong Ahafo (23.0%) and Upper East Regions (4.9%). These percentages mimic the respective shares of the regional population in the national population. About 55.6 percent of the residents in the Greater Accra Region indicate social participation while 44.4 percent report otherwise. While 62.4 percent of those residing in the Central Region reveal participation in social activities, 37.6 percent point to no social participation. For those in Brong Ahafo Region, 86.4 percent report social participation, with 13.6 percent reporting otherwise. Of those in the Upper East Region, 78.6 percent participate in social activities and 21.4 percent report no social participation.

Table 9: Descriptive statistics of independent variables for social participation

Variable	Frequency (n)	Percent (%)	Social participation		X^2, *p*-value
			Yes (%)	No (%)	
Sex					3.204, 0.073
Male	337	58.61	68.55	31.45	
Female	238	41.39	61.34	38.66	
Educational attainment					4.094, 0.393
None	57	9.91	66.67	33.33	
Basic	123	21.39	67.48	32.52	
Secondary	130	22.61	60.77	39.23	
Cert/dip/hnd	103	17.91	61.17	38.83	
Tertiary	162	28.17	70.37	29.63	
Locality					0.231, 0.631
Urban	485	84.35	65.15	34.85	
Rural	90	15.65	67.78	32.22	
Employment status					3.650, 0.601
Paid employee	290	50.43	63.79	36.21	
Self-employed with employee	84	14.61	61.90	38.10	
Self-employed without employee	119	20.70	68.91	31.09	
Contributing family worker	29	5.04	68.97	31.03	
Casual work	50	8.70	70.00	30.00	
Other	3	0.52	100.00	0.00	
Region					39.651, 0.000
Greater Accra	266	46.26	55.64	44.36	
Central	149	25.91	62.42	37.58	
Brong Ahafo	132	22.96	86.36	13.64	
Upper East	28	4.87	78.57	21.43	
Marital status					1.854, 0.603
Never married	240	41.74	63.75	36.25	
Married	262	45.57	67.56	32.44	
Divorced/separated	45	7.83	60.00	40.00	
Widowed	28	4.87	71.43	28.57	
Labour					9.765, 0.002
skilled labour	310	53.91	71.29	28.71	
unskilled labour	265	46.09	58.87	41.13	
Perceived/Self-rated good health status					169.195, 0.000
Yes	401	69.74	82.54	17.46	
No	174	30.26	26.44	73.56	

Source: Adinkra-Darko (2021)

Considering the employment status of the respondents, paid employees constitute 50.4 percent, self-employed without employee (20.7%), self-employed with employee (14.6%), casual worker (8.7%), contributing family work (5.0%) and other (0.5%). Of these, the majority of them - paid employees (63.8%), self-employed without employee (68.9%), self-employed

with employee (61.9%), casual workers (70.0%), contributing family work (69.0%) and other (100.0%) - have social participation.

On marital status, most of the respondents (45.6%) are married, never married (41.7%), divorced/separated (7.8%) and widowed (4.9%). Of those who are married, 67.6 percent participate in social activities while 32.4 percent report no involvement in social activities. For those who have never married, 63.8 percent and 36.3 percent indicate social participation and no social participation respectively. Among the divorced/separated, 60 percent indicate participation in social activities. Also, out of the respondents who are widowed, 71.4 percent report social participation.

It is also evidenced from Table 9 that majority are skilled labour (53.9%) and unskilled labour (46.1%). Of those who are skilled, 71.3 percent participate in social activities relative to 28.7 percent without social participation. With the unskilled labour, 58.9 percent reveal involvement in social activities that create opportunities for interaction whereas 41.1 percent report no social participation.

Finally, out of the total of 575 respondents studied, 69.7 percent perceive themselves as having good health status (self-rated good health) while 30.3 percent report otherwise. Among those with perceived good health status, 82.5 percent participate in social activities, with 17.5 percent indicating no participation. However, of those who do not consider themselves as having good health status, 30.3 percent indicate social participation and 60.7 percent report otherwise. The implication is that good health status is a key driver of social participation.

Chapter Summary

The chapter has provided a brief description of the socio-demographic characteristics of the study participants, including their ages, sex, marital status, region and locality of residence, religious affiliations, educational attainment, educational programmes studied, migration status, housing arrangement, employment status, and ethnic background. It also presented the summary and descriptive statistics of the variables used in the analyses. The next chapter is the results and discussions of the first empirical objective, which investigates determinants of unemployment duration in Ghana.

CHAPTER FIVE

DETERMINANTS OF DURATION OF UNEMPLOYMENT IN GHANA

Introduction

This chapter presents and discusses the results of the first empirical objective of the study, which examines individual-specific factors that affect unemployment duration in Ghana. The chapter specifically examines (a) the effects of individual traits on unemployment duration, and (b) the joint effect of migration status and educational attainment on unemployment duration.

The analyses were conducted within the framework of job search theory and human capital theory. Using a sample of 575 respondents, the study employed semi-parametric Cox proportional hazard models to evaluate individual-specific factors that influence unemployment duration in Ghana. In the ensuing sections of the chapter, the study presents the discussion of the results and ends with a chapter summary.

Test of Cox Proportional Hazards Assumption

The Cox proportional hazards assumption states that the hazards of two observations are proportional. For the proportional hazards assumption to be legitimate, the individual covariates must be statistically insignificant at five percent (p-value>0.05). In Table 10, the study presents the results of the test of the Cox proportional hazards assumption. The results provide enough evidence that suggests non-violation of the assumption since all the covariates are statistically insignificant (p-value >0.05). This implies the existence of proportionality of the hazards.

Table 10: Model test for the Cox proportional hazards assumption

Variable	Rho	chi2	Df	Prob>chi2
Age	0.01428	0.12	1	0.7237
Agesq	-0.01388	0.12	1	0.7267
Reservation wage	0.04221	1.04	1	0.3081
Household size	-0.01090	0.06	1	0.8126
Sex (male)	-0.03567	0.64	1	0.4244
Marital status (single)	0.04618	1.10	1	0.2937
Locality (urban)	-0.07200	3.09	1	0.0789
Social network	-0.04981	1.15	1	0.2832
Alternative income source	0.01398	0.10	1	0.7494
Migration (migrants)	-0.03009	0.50	1	0.4808
Education (base= Higher education)				
No education	0.02736	0.46	1	0.4993
Basic	0.06580	2.41	1	0.1206
Secondary	0.06247	1.99	1	0.1585
Cert/dip/HND	0.04741	1.18	1	0.2765
global test		11.13	14	0.6761

Source: Adinkra-Darko (2021)

Covariates of unemployment duration in Ghana

Once the assumption of proportionality of the hazards is not violated, the results of the Cox regression and the Cox proportional hazards models can be presented and discussed. Accordingly, the results of the Cox regression and the Cox proportional hazards models of the effects of individual-specific traits on unemployment duration and the joint effect of migration status and educational attainment on unemployment duration are presented in Tables 11 and 12 respectively. Independent variables examined in this context include age, reservation wage, household size, sex, marital status, locality, social network, alternative income source, migration status, and educational attainment.

As shown in both Tables 11 and 12, age and its squared (*agesq*) are both statistically significant at 1 percent (p-value <0.01), indicating the existence of a non-linear relationship. The results show that, initially, every additional year increase in age reduces the hazard rate for transiting from

unemployment to employment by 8.9 percent, but around 47 years, each additional year increases the hazard rate for employment by 0.1 percent per year. For instance, if persons within ages 15-24 years have an average unemployment duration of 11 months, all other things held constant, those within ages 25-34 years, 35-46 years, and those 47 years and older will experience 17 months, 19 months, and 18 months of unemployment respectively, on average.

This indicates that young job seekers will record a longer duration of unemployment than their adult peers. Adults are more likely to meet the requirements (such as years of labour market experience, higher education, or professional qualifications) of employers, and they mostly have better social capital than young people. These could enhance their chances of employability than the young job seekers in a labour market where both categories are struggling over the same and limited employment opportunities. This finding mirrors the results of Kherfi (2015) and Shumway (1993) that established that a departure from the state of unemployment to employment is more challenging for young job seekers than for the adult population. On the contrary, the finding contradicts that of Nonyana (2015) who found, in South Africa, a lower hazard rate for adults relative to young people.

Reservation wage (*lrwage*), the lowest wage at which a person will be willing to accept a given job offer, is statistically significant at 5 percent but does not have the expected sign. Holding other factors constant, unemployment duration is expected to be positively related to reservation wage, where a high reservation wage engenders a longer duration and a low reservation wage shortens the duration. The results indicate that a percentage

increase in reservation wage increases the hazard of leaving unemployment spell to employment by 14.6 percent (Table 11) and 14.2 percent (Table 12).

This could mean that persons in Ghana either do not have reservation wages or they do not enforce them because job opportunities are highly limited. Therefore, it would be too expensive to reject job offers based on their reservation wages in an economy where there is no support scheme such as unemployment compensation or allowance for the unemployed. Also, many unemployed persons are more likely to accept available job offers below their reservation wages, with the view to building their labour market experiences by way of preparing themselves for better offers in the future. Such persons may have reservation wages but will compromise when they receive job offers and wage rates lower than their reservation wages. This outcome conflicts with some studies (Lancaster, 1990; Mortensen, 1986; Stigler,1962) that posited that unemployed persons with high reservation wages might experience a longer unemployment duration than their counterparts with low reservation wages.

Urban residents have 19.9 percent (Table 11) and 18.7 percent (Table 12) lower hazard rates for getting employment than their rural peers at 10 percent significance level. The situation could be attributed, in part, to the persistently high unemployment levels in urban areas resulting largely from the influx of rural-urban migrants in search of non-existing jobs in urban areas. Usually, most rural-urban migrants have little/no education, are poorly skilled, have no formal work experience, and are not well connected. These mostly preclude them from some job offers in urban areas, and they end up unemployed and add up to the unemployment levels in urban areas with the

attendant long stay in employment. The implication is that most urban job seekers will suffer a longer unemployment duration than their counterparts in rural areas. This is consistent with Shumway's (1993) claim that urban areas are associated with lower hazard rates and longer unemployment durations than rural areas.

The variable social networks (*snet*) is statistically significant at 5 percent. The results show that among unemployed persons, those with social networks are about 20 percent (Table 11) and 21 percent (Table 12) more likely to find employment than those without social networks, keeping all other factors constant. Access to information is key in job search and eventual employment, and social networks are indispensable in this regard. This is because access to information about job openings potentially facilitates the job search process.

Therefore, people who have avenues to share information among themselves are more likely to succeed in job search, have higher hazard rates, and have a shorter unemployment duration than those who do not have any means of networking. This finding mimics Marek, Damm and Su (2016), who revealed that in Germany, people with good social networks have higher chances of finding jobs, hence shorter unemployment time. This supports the assertion of Gush, Scott and Laurie (2015) that 'who you know', or social network, is indispensable to job seekers in the 21st century on three counts: (a) what they can impart, (b) what they know about you and (c) what you know about them.

Alternative income source (*alt_income*) is statistically significant at 10 percent and negative in sign. The results in Tables 11 and 12 indicate that

unemployed persons who receive financial support from family members, friends, and others stand about 14 percent higher risk of remaining unemployed, compared to those without such support. In other words, unemployed persons who are supported financially tend to have lower hazard rates and longer unemployment duration, all other things held constant.

This could mean that instead of them leveraging such financial resources to increase job search activities, it rather makes them relax on job search, which increases the risk of staying unemployed. It could also mean that because of such support, they would not like to rush into accepting any job offer but wait until they get better offers. Such people behave like in some countries where the existence of unemployment insurance/compensation makes some people either develop higher reservation wages or relent on job search, which ultimately results in lower hazard rates and longer duration. This finding corroborates Røed and Zhang (2003) who demonstrated that marginal upward adjustments in unemployment compensations significantly reduce the likelihood of existing unemployment spells to employment.

On migration status, migration (*migrant*) is statistically significant at 5 percent and positive. The result in Table 11 depicts that, unemployed persons who migrate in search of jobs reduce their risk of unemployment by approximately 23 percent relative to their peers who do not migrate. Migration helps to redistribute labour across different labour markets with employment prospects consistent with the neoclassical theory of migration which regards migration as the outcome of geographical disparities between labour demand and labour supply which exist at various levels (De Haas, 2010; Kurekova, 2011).

As people migrate, they tend to experience many opportunities as well as competition in the labour market. The net effect has mostly been positive, including a shorter unemployment duration for job seekers. This finding is in harmony with Fromentin (2012), who established that migration has a long-term unemployment-reducing effect. The implication is that migration increases hazard rates and shortens waiting time for employment. Contrary to this finding, Shumway (1993) argued that migration raises the likelihood of remaining in the state of unemployment.

As presented in Table 11, all the categories except basic education are statistically insignificant. Thus, though not statistically significant, people who have no education have about 8.7 higher hazards than those who have higher education, implying a longer duration for the latter category than the former. Those with secondary education and certificate/diploma/HND qualifications have about 16.6 percent and 13.5 percent higher risk respectively of remaining unemployed than those who have higher education. Basic education is statistically significant at 5 percent and negative in sign. The result indicates that people who have the basic education qualification have about 27.4 percent lower probability of exiting unemployment than those with higher education.

All other things being equal, people who have higher education tend to be more productive and efficient, and usually meet the requirements of most firms. Education enhances an individual's prospects in the labour market. This resonates with studies (Becker, 1964, 1974; Dănăcică & Cîrnu, 2014; Dănăcică, 2012; Kenny, 2019; Nonyana, 2015; Rahman et al., 2019) that suggest that a person's success in the labour market is influenced by investments in human capital, including education.

Table 11: Covariates of unemployment duration (non-interaction model)

_t	Coefficient	Robust Std. Err.	P>z	Hazard Ratio	Robust Std. Err.
Age	-0.093	0.026	0.000	0.911	0.023
Agesq	0.001	0.000	0.003	1.001	0.000
Lrwage	0.136	0.063	0.029	1.146	0.072
Hsize	-0.008	0.015	0.607	0.992	0.015
Male	0.018	0.081	0.824	1.018	0.082
Single	-0.048	0.086	0.582	0.954	0.082
Urban	-0.222	0.121	0.065	0.801	0.097
Snet	0.183	0.079	0.021	1.201	0.095
alt_income	-0.150	0.080	0.060	0.861	0.069
Migrant	0.206	0.084	0.014	1.228	0.103
education (base = higher)					
no education	0.083	0.169	0.622	1.087	0.184
Basic	-0.321	0.130	0.014	0.726	0.094
Secondary	-0.181	0.121	0.133	0.834	0.101
cert/dip/hnd	-0.145	0.126	0.249	0.865	0.109
No. of observations		575			
Prob > chi2		0.000			
Global test		chi2		Df	Prob > chi2
		11.13		14	0.676

Note: Std. Err. denotes standard error.
Source: Adinkra-Darko (2021)

It further presupposes that a highly developed human capital enhances employability, reduces unemployment and shortens the length of unemployment among job seekers, all other things held constant. A similar result was obtained by Kisto (2014) in Mauritius, where people with secondary, vocational, higher education and/or professional qualifications were found to have a shorter employment waiting time, relative to those who have lower educational attainment. Contrary to this are the results of Kherfi (2015) and Shumway (1993). While Kherfi (2015) established that people who have secondary education or higher are associated with longer unemployment duration, Shumway (1993) posited every additional year of education worsens the risk of maintaining an unemployment status by roughly 2 percent.

From Table 11, we realise a positive effect of migration on duration, where migrants are associated with a higher hazard rate and shorter duration than non-migrants. Table 11, further, establishes that higher education reduces the risk of remaining unemployed. What we, however, do not know is the nature of employment people are engaged. Nonetheless, in line with the human capital model, we can, to a large extent, also presume that people who have a higher education have a higher probability of securing decent jobs than those with lower or no education (Becker, 1964, 1974).

This makes it imperative to assess the joint effect of migration status and educational attainment on waiting time for employment. The rationale behind this interaction is to provide an idea about the kind of job one is likely to find when one migrates, given one's level of human capital (education). All other things being equal, individuals who have higher education are more likely to secure decent jobs than those with lower or no educational qualifications. The joint effect of migration status and educational attainment on unemployment duration is provided in Table 12.

In this analysis, the base category is migrants with higher education (*migrant#higher education*). The results, generally, indicate that migration and higher education increase the chances of finding jobs and, therefore, shorter duration of unemployment. As shown in Table 12, all the categories of the interaction term have the expected signs but some are statistically not significant factors influencing unemployment duration. The components that are not significant include migrants without education (*migrant#no education*); migrants with certificate, diplomat or HND qualification

(*migrant#cert/dip/hnd*); and non-migrants without education (*non-migrant#no education*).

Among migrants, those with higher educational qualifications have higher hazard rates and shorter unemployment durations than those with lower educational attainments. The category, migrants with basic education qualification (*migrant#basic*), is statistically significant at 1 percent and negative in sign. The result shows that migrants with basic education have about 40.7 percent higher risk of remaining unemployed, compared to migrants who have higher education. At 5 percent significance level, migrants who have secondary education (*migrant#secondary*) have an estimated 31.8 percent lower probability of transiting from unemployment to employment, relative to migrants with higher education. This implies a longer duration for migrants with secondary education.

Table 12 further shows that non-migrants with basic education qualification (*non-migrant#*basic) is significant at 5 percent and bears the expected negative sign. The result presents that the non-migrants with basic education have about 35.1 percent lower hazard rate for finding employment, therefore, longer unemployment duration than higher education holder migrants.

Also, the non-migrants with secondary education (*non-migrant#secondary*) has the predicted negative sign and it is statistically significant at 5 percent. The result indicates that non-migrants who have a secondary education are 30 percent more likely to remain unemployed, compared to migrants with higher education. This suggests a longer

unemployment duration for non-migrant with secondary education than migrants who have higher education.

Moreover, the variables, non-migrants with certificate, diploma or HND (*non-migrant#cert/dip/hnd*) and non-migrants with higher education (*non-migrant#higher*), are both statistically significant at 1 percent and consistent with the negative sign. As depicted in Table 12, non-migrants with certificate, diploma or HND qualifications (*non-migrant#cert/dip/hnd*) and non-migrants with higher education (*non-migrant#higher*) increase their risks of keeping unemployment status by 43 percent and 38 percent respectively, and they are associated with a longer waiting time for employment relative to migrants with higher education.

Table 12: Covariates of unemployment duration (interaction model)

_t	Coefficient	Robust Std. Err.	P>z	Hazard Ratio	Robust Std. Err.
Age	-0.093	0.025	0.000	0.911	0.023
Agesq	0.001	0.000	0.002	1.001	0.000
Lrwage	0.133	0.063	0.035	1.142	0.072
Hsize	-0.008	0.015	0.576	0.992	0.015
Male	-0.001	0.080	0.989	0.999	0.080
Single	-0.018	0.086	0.831	0.982	0.084
Urban	-0.207	0.121	0.086	0.813	0.098
Snet	0.192	0.080	0.016	1.211	0.096
Alt-income	-0.146	0.080	0.069	0.864	0.069
migration#education (Base = migrants with higher education)					
migrant#no education	-0.060	0.208	0.772	0.941	0.196
migrant#basic	-0.523	0.163	0.001	0.593	0.096
migrant#secondary	-0.383	0.160	0.017	0.682	0.109
migrant#cert.dip/hnd	-0.129	0.168	0.444	0.879	0.148
non-migrant#no education	-0.156	0.271	0.566	0.856	0.232
non-migrant#basic	-0.432	0.195	0.027	0.649	0.126
non-migrant#secondary	-0.357	0.161	0.026	0.700	0.113
non-migrant#cert/dip/hnd	-0.563	0.176	0.001	0.570	0.100
non-migrants#higher	-0.478	0.158	0.003	0.620	0.098
No. of observations		575			
Prob > chi2		0.000			
Global test		chi2	Df	Prob > chi2	
		14.04	18	0.726	

Note: Std. Err. denotes a standard error.
Source: Adinkra-Darko (2021)

Migration increases the chances of employability and potentially reduces unemployment duration among job seekers. When people migrate on the back of a job search, they intensify job search activities and become exposed to many job offers as well as competition in the labour market. The net effect has been positive for the migrant job seeker. Moreover, the opportunities in the labour market are better when the migrants have higher education, compared to low or no education. All other things being equal, individuals who have higher education are more likely to secure decent jobs than those who have lower educational qualifications or no education. Therefore, as individuals decide to migrate on the grounds of job search, they must ensure they have good education qualifications: so that if they are transiting from unemployment, they will be able to find decent jobs. This is because higher hazard rates do not guarantee a departure into decent jobs.

Chapter Summary

This chapter presented the results and discussions on determinants of unemployment duration in Ghana, using data from four administrative regions. The chapter employed a sample of 575 observations and the semi-parametric regression and Cox proportional hazard models within the locus of the job search and the human capital theories to evaluate determinants of unemployment duration, with a special focus on the joint effect of migration status and educational attainment. Accordingly, two separate (interaction and non-interaction) models were estimated. The analyses suggested non-violation of the proportional hazards assumption which made it possible for the generation of the parameter estimates of the factors influencing unemployment duration.

The chapter established that age, reservation wage, locality of residence, social network, access to alternative income sources, migration, and education are significant individual-specific factors affecting unemployment duration. The chapter, further, revealed that migrants with higher education are associated with higher hazard rates and shorter duration of unemployment than migrants with lower educational attainments as well as non-migrants regardless of the educational background. The next chapter presents the results and discussions on the effect of unemployment duration on migration intention.

CHAPTER SIX

EFFECT OF UNEMPLOYMENT DURATION ON MIGRATION INTENTION

Introduction

This chapter presents the results and discussions of the second empirical objective, which focuses on the effect of unemployment duration on migration intention. In examining the effect of unemployment duration on intention to migrate, a sample of 575 and the probit model are employed within the context of the neoclassical theory of migration and the human capital theory of migration. In all, five models including composite, male, female, urban, and rural models are estimated. In the subsequent sections, the discussions of the results obtained from the analyses and the chapter summary are presented.

Effect of Unemployment Duration on Migration Intention

The results of the analysis of the effect of unemployment duration on migration intention are shown in Table 13. The results indicate that an every additional month increase in unemployment duration (*undur)* increases the probability of having the intention to migrate by 0.001 but it is not significant (p-value=0.219). The insignificant effect of unemployment duration on migration intention could be attributed to technological advancement and improvement in communication since people can now sit in their homes and search and/or apply for jobs online without necessarily relocating to other communities for job search or as a means of contacting firms for a job.

Levels of education have a significant positive effect on migration intention. For example, individuals with basic education qualifications have

0.145 higher probability of wanting to migrate, compared to those with no educational qualification and it is significant at 5 percent (p-value=0.034). Again, secondary education holders have 0.128 higher probability of intending to migrate than those with no education and it is significant at 10 percent (p-value=0.055). Moreover, people who have certificate, diploma or HND qualifications have 0.133 higher probability of migration intentions, compared to those with no educational qualification and it is significant at 10 percent (p-value=0.078). Finally, higher education holders have about 0.136 higher probability of developing migration intentions relative to persons with no educational qualification and it is significant at five percent (p-value=0.036).

Generally, when people's level of educational attainment improves, their taste and lifestyle change with regards to the type of job/employment, salaries, place of residence, healthcare services, educational facilities, and recreational activities among others they seek. In most cases, these could not be accomplished in their communities of origin, hence the necessity to migrate, holding all other factors constant. This finding conforms with Sjaadstad's (1962) human capital theory of migration and is also consistent with empirical studies (Bauer & Zimmerman, 1999; Dao et al., 2018; De Haas, 2010; Foster, 2017; Shuttleworth, Östh & Niedomysl, 2017) whose findings suggest that individuals with higher educational qualifications tend to have higher migration aspirations than those with lower qualifications. The finding again affirms that of Mora and Taylor (2005) that schooling has a significant positive effect on (internal) migration.

The neoclassical theory of migration posits evidence of a linear association between wage variations and migration (Borjas, 2008; Kurekova,

2011). Perceived better wage elsewhere (*PB_wage)* is statistically significant at 1 percent (p-value=0.000) and positive in sign, implying that individuals who perceive better wages elsewhere are more likely to have migration aspirations. The result in Table 13 shows that individuals who perceive an existence of better wages elsewhere have 0.317 higher probability of migration aspirations than those who do not perceive such.

Societies that have limited labour supply are mostly associated with higher wages than those with excess labour supply, and such societies ultimately become the target of labour migrants, all other things being equal. Therefore, when individuals begin to perceive wage variations in favour of other societies and areas, their intentions to migrate heighten. This affirms the position of Massey et al. (1993) that migration intention is significantly influenced by predicted rather than actual earnings. It also confirms the conclusion of Patnaik, Satpathy and Mandal (2014) that the existence of an excess workforce in the community of origin and anticipated increase in income elsewhere are factors that drive migration aspirations.

Individuals daring to mitigate poverty are more likely to develop migration aspirations than those who are not on the bent of mitigating poverty. It is evident from the result in Table 13 that the desire to mitigate poverty (*mpov)* is significant at 5 percent (p-value=0.012) and positive, indicating that individuals who are zealous to mitigate poverty have an estimated 0.108 higher probability of migration intentions than those without such ambition.

This could explain why many young people from Ghana, particularly Brong Ahafo Region now (Ahafo, Bono, and Bono East Regions), embark on risky journeys to Europe through the desert and by the Sea, with the view to

averting poverty. This resonates with Najib et al. (2019), whose finding implies that brain drains take place mostly in low and middle-income communities and societies as a potential to generate income and circumvent poverty. It also supports the argument of Migali and Scipioni (2018) that one's satisfaction with prevailing living standards is associated with a lower probability of craving to migrate, as compared with those who are dissatisfied.

Table 13: Effect of unemployment duration on migration intention

Migration Intention	M. E.	Std. Err.	P>z	[95% Conf. Interval]	
Undur	.001	.001	0.219	-.001	.003
education (base=no education)					
Basic	.145	.068	0.034	.011	.280
Secondary	.128	.066	0.055	-.003	.258
cert/dip/hnd	.133	.076	0.078	-.011	.262
Higher	.136	.065	0.036	.009	.263
Pb_wage	.317	.065	0.000	.189	.445
Mpov	.108	.043	0.012	.024	.191
Hsize	-.006	.007	0.366	-.020	.007
Rural	.098	.046	0.032	.008	.187
Age	-.009	.002	0.000	-.013	-.004
Com	.146	.041	0.000	.067	.226
Sent	-.096	.040	0.015	-.174	-.019
Marital status(base=married)					
Never married	-.014	.045	0.752	-.101	.073
Divorced/separated	-.119	.068	0.080	-.252	.014
Widowed	.006	.086	0.945	-.163	.175
Female	-.047	.037	0.205	-.119	.026
Infrast	-.055	.018	0.002	-.090	-.020
N	575				
Prob > chi2	0.000				
Link test	Coeff.	Std. Err.	p>|z|		
_hat	.995	.084	0.000		
_hatsq	.132	.088	0.136		
Goodness-of-fit	Pearson chi2(538) = 576.93		Prob > chi2 = 0.166		

Note: M.E. is marginal effect, Std. Err. is the standard error. M.E. for factor levels is the discrete change from the base level.
Source: Adinkra-Darko (2021)

Individuals who live in rural areas are more likely to migrate than their counterparts in urban areas. At 5 percent significance (p-value=0.032), rural residents have 0.098 higher probability of intention to migrate, relative to

residents in urban areas, as presented in Table 13. Most rural communities lack basic infrastructure and social amenities including roads, institutions of higher learning, healthcare facilities and services, electricity, potable water, and telecommunication networks. Also, economic activities in the rural areas are fundamentally agriculture-related which are generally not productive, resulting in low incomes and high levels of poverty. All these practically make life in rural areas quite uncomfortable, hence a higher likelihood of migration intentions.

This result corroborates Obayelu, Obayelu and Tolorunju (2020) and Makina (2012), who opined that educational levels, economic activities, and income levels in the local communities affect migration decisions. It also supports Abedi-Lartey (2016) and Faisal et al. (2013), who maintained that poor health and educational facilities, lack of social amenities, and limited income opportunities increase rural-urban migration. The result, however, contradicts that of Lyu et al. (2019) who, in Jiangsu Province of China, found no evidence of people being pulled to cities by better income prospects and pushed out of rural areas to urban areas by a scarcity of water.

The results in Table 13 also show that intention to migrate decreases with age. At 1 percent significance (p-value=0.000), every additional year increase in age decreases the probability of migration intention by 0.009. Migration mostly involves physical, psychological, and financial costs and risks. As individuals age, they raise families, build social ties and, in some instances, acquire physical assets, all of which potentially increase the risk and cost associated with migration and diminish the desire to migrate, all other things being equal. Again, young people are more adventurous and desirous to

achieve more. They usually believe that they can make it better in life when they migrate, an attitude which diminishes as the individual ages.

This finding is consistent with the result of Dao et al. (2018) who argued that young people tend to show higher migration aspirations than older people. The result also confirms Bernard and Pelikh's (2019) finding that established higher migration numbers among the youth who are early movers than adults who are late movers from their parental homes. In Sweden, Shuttleworth, Östh and Niedomysl (2017), however, asserted that age does not affect migration.

People who consider cost of migration (*com)* in their job search efforts are more likely to develop intentions to migrate than those who do not make such consideration. From Table 13, individuals who consider cost of migration have 0.146 higher probability of migration aspirations than their peers without such consideration and it is significant at 1 percent (p-value=0.000). The implication is that those who factor cost of migration (psychological, financial, and risk) in their decisions are mostly able to prepare for it in terms of making the necessary arrangements or getting themselves ready for whatever might happen when they eventually migrate. Such consideration mostly promotes migration aspirations than when there is nothing like that.

Again, individuals who have social networks (in local communities) are less likely to have migration intentions, compared to their peers without social networks. The result in Table 13 depicts that, persons with social networks are associated with a 0.096 lower probability of developing migration intentions, compared to those without social networks and it is significant at 5 percent (p-value=0.015). When people build social networks

within their local communities, they tend to develop strong social ties that are usually difficult to part away. This potentially impairs any intention to migrate. This confirms the finding of Migali and Scipioni (2018), suggesting that people with good social networks outside their local communities have a higher probability of migration. It is also consistent with the finding of Maczulskij, Böckerman and Kosonen (2018), who opined that local social capital decreases the propensity to migration.

Furthermore, improvement in access to infrastructure has a negative effect on migration intention. The result in Table 13, moreover, presents that improved access to infrastructural facilities reduces the probability of migration intention by 0.055 and it is significant at 1 percent (p-value=0.002). All other things being equal, improved access to economic and social infrastructure and amenities such as roads, schools, healthcare facilities and services, entertainment centres, telecommunication, technological aids, electricity and potable water enhances the quality of life of the population of an area.

Moreover, the existence, quality, and sustainability of these facilities and resources are potential sources of jobs, employment, and livelihoods for many people. Therefore, individuals who live particularly in (urban) areas where these facilities are available might not in most instances have migration aspirations. This, in part, could account for most of the rural-urban migrations in the country. This finding is consistent with Abedi-Lartey (2016) and Faisal et al. (2013), whose findings suggested that poor health and educational facilities, and the absence of adequate social amenities increase the intention to migrate, particularly from rural areas to urban areas.

Effect of Unemployment Duration on Migration Intention (Gender)

To examine the effect of unemployment duration on migration intention, the study further disaggregates the effect into male and female models. As presented in Table 14, Model 1 is the model for females only, and Model 2 is for males only.

In columns 2 and 5, an increase in unemployment duration by one month increases the probability of migration intention by 0.003 for both sexes and it is significant at a 10 percent level (p-value=0.063 and p-value=0.071 for females and males respectively). This suggests males and females react to the number of months they remain unemployed in a similar way regarding migration decisions.

The recent development in technology and improvements in communication networks allows job seekers to search and/or apply for jobs online without necessarily making physical contact with firms. This is gradually affecting individuals' intentions to migrate in search of a job, especially men. Also, the growing demand for services of female migrants is influencing the migration aspirations of women because it provides them with several job offers which are mostly lacking in their communities of origin. This is contrary to some earlier studies that suggested that males migrate on the grounds of work while females migrate as accompanying dependents (Carling, 2005). The finding, further, conflicts with some studies (Abraham, Bähr & Trappmann, 2019; Migali & Scipioni, 2018) that posited that men exhibit a higher probability and willingness to migrate for employment than women. Maczulskij, Böckerman and Kosonen (2018) also argued that for

women, unemployment duration is negatively related to the probability to migrate.

The levels of education, in the female model, have a positive but insignificant effect on migration intention. The same applies to the male model, except for males with secondary education. Among males, those with secondary education have 0.244 higher probability of having migration intentions, compared to those without education, at 1 percent significance (p-value=0.006).

In both female and male models, perceived better wage elsewhere is statistically significant at 1 percent (p-value=0.001 and p-value=0.000 respectively) and positive. The result, in Table 14 Model 1, shows that females who perceive better wages elsewhere have 0.344 higher probability of migration aspirations than those who do not anticipate such. In Model 2, males who perceive better wages elsewhere are associated with 0.316 higher probability of having migration intention than their counterparts who do not have any perception of such. The 0.028 difference in the probabilities of migration intention between the female and the male models implies positive impacts of migration on women. This is in harmony with Jolly, Reeves and Piper (2005), who maintained that migration can constitute an important income source for women and their households, make them confident and self-reliant, and grant them a social class.

As evident in Table 14, females who desire to mitigate poverty have 0.139 higher probability of migration intentions compared to their counterparts without such desire and it is significant at 5 percent (p-value=0.041). However, for males, the desire to mitigate poverty has a positive but

insignificant (p-value=0.213) effect on migration intention. The growing spate of higher education among women, partly, is changing the economic dynamics such that their decisions to migrate are predominantly shaped by marriage alone. Of late, women aspire to migrate on the ground of higher education, economic prospects, and even politics. This finding is consistent with Patnaik, Satpathy and Mandal (2014), who indicated that women migrate for increased employment prospects and improved living standards.

Rural areas in Ghana generally lack many basic infrastructures and social amenities as well as decent jobs, affecting the quality of life of the inhabitants. The absence of these assets makes many rural residents develop migration aspirations. The results in Table 14 depict that, females in rural areas have 0.120 higher probability of migration intention compared to those in urban areas and it is significant at 10 percent (p-value=0.059). Urban residents, all other things being equal and as expected, will have little motivation to migrate compared to their rural peers because urban areas have several resources that make life much more comfortable. For males, locality has a positive but insignificant influence on migration intention (p-value=0.156).

Migration is associated with risks. As a person ages, the love and willingness to take such risks typically diminish. For both sexes, age has a negative effect on migration intentions. Among females, every year increase in age decreases the probability of migration intention by 0.008 at 5 percent significance level (p-value=0.039), and for males, a year increase in age reduces the probability of migration intention by 0.009 at 1 percent level of significance (p-value=0.001), as offered in Table 14.

Table 14: Effect of unemployment duration on migration intention (Gender analysis)

Migration intention	Model 1: Female			Model 2: Male		
	M.E.	Std. Err.	P>z	M.E.	Std. Err.	P>z
Undur	.003	.001	0.063	.003	.001	0.071
Education (base=no education)						
Basic	.166	.126	0.188	.127	.097	0.188
Secondary	.024	.130	0.856	.244	.089	0.006
cert/dip/hnd	.143	.133	0.284	.150	.095	0.116
Higher	.173	.130	0.185	.130	.086	0.131
Pb_wage	.344	.101	0.001	.316	.085	0.000
Mpov	.139	.068	0.041	.067	.054	0.213
Hsize	-.007	.012	0.546	-.005	.009	0.576
Rural	.120	.064	0.059	.094	.066	0.156
Age	-.008	.004	0.039	-.009	.003	0.001
Com	.144	.063	0.022	.148	.053	0.005
Snet	.106	.051	0.040	.067	.061	0.278
Marital status(base=married)						
Never married	.006	.069	0.931	-.020	.058	0.733
Divorced/separated	-.058	.118	0.624	-.143	.097	0.138
Widowed	.076	.103	0.464	-.151	.176	0.391
Infrast	-.061	.029	0.037	-.041	.022	0.067
N	238			337		
Prob > chi2	.000			.000		
Log likelihood	-118.258			-169.171		

Note: M.E. is marginal effect, Std. Err. is the standard error. M.E. for factor levels is the discrete change from the base level.

Source: Adinkra-Darko (2021)

Migration (except during wartime, conflicts, and instances of political refugees), should be a thoughtful rather than an ad-hoc event. Therefore, individuals in most cases make a lot of considerations including the cost of migration before settling on whether to migrate or not. Table 14 indicates that at 5 percent significance (p-value=0.022), females who consider the cost of migration are associated with 0.144 higher probability of developing migration aspirations relative to their counterparts who do not make such consideration. Likewise for males, those who are concerned about the cost of migration have 0.148 higher probability of migration intention compared to their peers who do

not bother themselves with issues of cost of migration, at 1 percent (p-value=0.005).

For females, those who have social networks are associated with about 0.106 higher probability of migration intentions compared to those without social networks at 5 percent (p-value=0.040) significance. This could imply that the sources of the social networks of the females are outside their local communities, hence the increased intention to migrate. The external social networks then become a pull factor for the females who belong to the networks. For males, on the other hand, social networks have an insignificant positive effect on migration intentions, as shown in Table 14.

Enhanced access to economic and social infrastructure potentially increases life's comfort and lessens migration aspirations, holding all other factors constant. The results in Table 14 further present that females with access to infrastructure are associated with 0.061 lower probability of migration intentions than females without infrastructural access at 5 percent significance level (p-value=0.037). The picture is not different for males. Males who have access to infrastructural facilities decrease their chances of migration intention by about 0.041 and it is significant at 10 percent level (p-value=0.067). The implication is that when there is a general improvement in access to economic and social infrastructure, both males and females will have a lower propensity to migrate.

Effect of Unemployment Duration on Migration Intention (Locality)

The study also analysed the effect of unemployment duration on migration intentions in both rural and urban areas separately. The results are presented in Models 1 and 2 of Table 15. The results show that unemployment

duration has an insignificant positive effect on migration intention in both rural and urban areas (p-value=0.826 and p-value=0.398 respectively). The implication is that the number of months individuals stay unemployed does not significantly influence their intention to migrate, in both urban and rural areas, holding all other things constant. This could be explained by the advancement in technology and the improvements in communication networks which have made it possible for job seekers to search and/or apply for jobs online without necessarily making physical contact with firms. Regardless of the locality, once there is access to the internet, and other forms of modern communication and information dissemination one can conveniently search and/or apply for a job without practically migrating because of job search.

In rural areas, levels of educational attainment have insignificant positive effects on migration intention as presented in Model 1. For urban areas, education has significant positive effects on migration intention, as captured in Model 2 (Table 15). For instance, urban residents with the basic education qualification are associated with 0.163 higher probability of the intention to migrate compared to their peers with no education. It is significant at 5 percent level (p-value=0.026). Again, urban residents who have secondary education have 0.193 higher likelihood of migration intention compared to their counterparts who have no educational attainment and it is significant at 1 percent (p-value=0.006).

Also, individuals who live in urban areas and have certificate, diploma or HND qualifications have 0.174 higher probability of migration intentions than those who have no educational qualification, and it is significant at 5 percent level (p-value=0.018). Finally, urban residents with tertiary education

are 17.1 percent more likely to develop migration aspirations compared to their peers without education. This is significant at 5 percent level (p-value=0.012).

Educational attainments are higher in urban areas than in rural areas. Higher education comes with better prospects which are usually not found in the communities of origin, requiring that one migrates to be able to grasp such opportunities. The implication is that as one is climbing higher on the educational ladder, one is already aware that one's services might be needed in communities other than theirs. This heightens their migration aspirations, especially in urban areas. This result supports the findings of some previous studies (De Haas, 2010; Foster, 2017; Shuttleworth, Östh & Niedomysl, 2017) establishing that individuals with higher educational qualifications tend to be associated with higher aspirations for migration than those with lower qualifications.

The expected wage rate is a significant determinant of migration intentions in both rural and urban areas. Rural residents who perceive better wages elsewhere (*Bwage)* have a higher probability of developing migration intention than urban dwellers who think similarly. According to the results presented in Table 15, at 5 percent significance level (p-value=0.034), rural dwellers who perceive better wages elsewhere are about 28.1 percent more likely to have migration intention, compared to their peers who do not think such. For urban residents, those who perceive better wages elsewhere are about 24.2 percent more likely of wanting to migrate than their urban equals who do not have such perception and it is significant at 1 percent (p-value=0.000). It can be deduced from the results that the impact of anticipated

wage differentials on migration intention is higher in rural communities than in urban areas.

Considering the desire to mitigate poverty (*Mpov),* at 1 percent significance (p-value=0.004), urban residents who aspire to mitigate poverty have 0.117 higher probability of migration intention than their counterparts who do not consider poverty mitigation. In rural areas, the desire to mitigate poverty has no significant effect on the intention to migrate (p-value=0.852), as depicted in Table 15.

Table 15: Effect of unemployment duration on migration intention (locality)

Migration intention	Model 1: Rural			Model 2: Urban		
	M.E.	Std. Err.	P>z	M.E.	Std. Err.	P>z
Undur	.0003	.002	0.826	.001	.001	0.398
education (base=no education)						
Basic	.065	.128	0.610	.163	.073	0.026
Secondary	-.164	.115	0.153	.193	.070	0.006
cert/dip/hnd	-.101	.133	0.446	.174	.074	0.018
Higher	0	(omitted)		.171	.068	0.012
Pb_wage	.281	.132	0.034	.242	.061	0.000
Mpov	-.022	.118	0.852	.117	.041	0.004
Hsize	-.034	.023	0.144	-.001	.007	0.903
Age	-.001	.006	0.830	-.010	.002	0.000
Com	-.086	.105	0.413	.172	.038	0.000
Sent	-.241	.437	.581	.104	.044	0.017
Marital status(base=married)						
Never married	.178	.114	0.118	-.040	.048	0.404
Divorced/separated	-.263	.164	0.109	-.121	.076	0.111
Widowed	0	(empty)		.122	.102	0.231
Female	.027	.097	0.779	-.063	.040	0.117
Infrast	-.011	.048	0.814	-.054	.020	0.006
N	90			485		
Log likelihood	-30.975			-248.445		
Prob > chi2	.000			.000		

Note: M.E. is marginal effect, Std. E. is the standard error. M.E. for factor levels is the discrete change from the base level.
Source: Adinkra-Darko (2021)

Intention to migration decreases with age. The results in Table 15 show that increasing age by an additional year among urban residents reduces

migration intentions by 0.010 at 1 percent significance (p-value=0.000). Although age is not statistically significant for rural residents, it has the expected negative sign, implying that an increase in age among rural residents has an insignificant (p-value=0.830) negative effect on migration intentions.

Urban residents who factor cost of migration (*Com*) in their decisions have about 0.172 higher probability of migration intentions than their peers who are not concerned about cost of migration at 1 percent significance (p-value=0.000). However, consideration of cost of migration among rural residents has a negative but insignificant (p-value=0.413) effect on migration intention.

For urban residents, those with social networks have an estimated 0.104 higher probability of having migration intention relative to those who do not have social networks. It is significant at 5 percent (p-value=0.017). This means the source of the social networks is not found within the individuals' community of residence, hence a higher chance of migration aspirations. Among rural folks, however, there is no significant difference in the probability of having migration intentions between those with social networks and those without social networks. Thus, in rural areas, social networks have no significant effect on migration intention.

As evident in Model 2 of Table 15, access to infrastructural facilities reduces migration intention by 0.054 among urban residents at 1 percent significance (p-value=0.006). For rural residents, access to infrastructural facilities has an insignificant negative effect on migration intention, all other things being equal.

Chapter Summary

This chapter examined the effect of unemployment duration on migration intention in selected regions in Ghana. The results established that migration intention is positively associated with unemployment duration for both males and females. Also, educational attainments, perceived better wages elsewhere, desire to mitigate poverty, locality, age, consideration of cost of migration, social networks, and infrastructure are identified as significant factors that influence migration intentions. However, the effect of each of these factors on migration intention is not uniform across sexes and localities. The next chapter provides the results and discussions of the third objective, on the effect of unemployment duration on social participation.

CHAPTER SEVEN
EFFECT OF UNEMPLOYMENT DURATION ON SOCIAL PARTICIPATION

Introduction

This chapter analyses and discusses the effect of unemployment duration on social participation as captured by the third empirical objective of the study. With a sample of 575 individual respondents, the study employs the probit model and the empowerment in participation theory to evaluate the effect of unemployment duration on social participation. The investigation of the effect of unemployment duration on social participation took into cognisance pertinent issues such as gender and locational factors. Thus, the study presents the results and discussions of analysis of the effect of unemployment duration on social participation, having in mind the gender and locational dimensions, and ends with the chapter summary.

Effect of Unemployment Duration on Social Participation

Unemployment has diverse adverse impacts on its victims, households, and society at large. The potential impacts are anticipated to exacerbate the longer one stays unemployed and without necessary interventions and social protection systems. In Table 16, the study presents the results of the analysis of the effect of unemployment duration on social participation.

Unemployment duration impacts negatively on the social participation of the unemployed. As shown in Table 16, for every additional month an individual stays on unemployment the likelihood of social participation decreases by 0.002, at 10 percent significance. Unemployment, generally, denies its victims most of the resources and the power needed to ensure effective participation in social activities, holding all other factors constant.

Employment provides financial resources, empowerment and power, all of which fortify personal capacity and promote social participation, where individuals are able to effectively participate in decision-making and exercise some degree of control over resources in their society (Cavalieri & Almeida, 2018).

The absence of these on the back of unemployment and its attendant duration affects individuals' self-confidence and self-image, which makes them develop an inferiority complex and ultimately poor chances of social participation. This gets aggravated when the waiting time for employment is prolonged. This finding substantiates existing studies (Brand & Burgard, 2008; Dieckhoff & Gash, 2015; Lindner & Peters, 2014; Wulfgramm, 2011) whose findings maintained an inverse relationship between unemployment and associated duration, on one hand, and social participation, on the other hand.

Contrary to this finding, Rözera, Hofstra, Brashears and Volker (2020) conjectured that less than one year of unemployment is more probable to reduce sociability, whereas more than one year of unemployment is more frequently related to a rise in sociability. Moreover, Gallie, Paugam and Jacobs (2003), using data from selected European Union countries including the United Kingdom, found a higher likelihood of social participation for the unemployed than their employed peers. This could be explained by the existence of unemployment compensations in those countries which serve as a resource to promote social participation aided by free time due to unemployment. However, in Germany, the authors found unemployment to be associated with a decline in the memberships of community clubs which implies reduced social participation.

A decision to participate is significantly influenced by an individual's self-rated/perceived health status (*hstat).* As presented in Table 16, individuals who perceived themselves as being of good health status are about 46.2 percent more likely to have social participation than their counterparts who do not consider themselves as such. This is statistically significant at 1 percent. Keeping all other factors constant, good health status and, for that matter, a sound mind is a prerequisite for any undertaking, including social participation. Therefore, for people to have effective social participation, improved health status is indispensable. This finding upholds the findings of similar studies (Bourassa, Memel, Woolverton & Sbarra, 2017; Dawson-Townsend, 2019; Shah, Frank & Ehrlich, 2020) which established a positive social participation effect of health status.

The result is, however, in conflict with Mehrotra and Bail (2018), who indicated that in China, people who are depressed are more likely to visit community clubs to play table games. The authors, again and on the other hand, argued that people who have impairments in activities of daily living are associated with a lower probability of social participation. This implies that poor health status adversely affects social participation.

The variable, the number of children below the age of 10 years (*nch*), has an insignificant negative effect on social participation. The result shows that for every unit increase in the number of children below the age of 10 years, the probability of social participation reduces by 0.002 but it is statistically insignificant.

Educational attainment has an unsurprising effect on social participation. Higher levels of education promote social participation more

than lower levels, keeping all other factors constant. The results presented in Table 16 indicate that individuals who have a secondary education are about 9.8 percent less likely to have social participation than those with higher educational attainments and it is significant at 10 percent. Also, certificate, diploma or HND holders have 0.110 lower chances of social participation than higher educational qualification holders and it is significant at 5 percent. However, compared to higher education, persons with basic education or no educational qualification have insignificant lower probabilities of social participation.

Higher education promotes empowerment since human capital is developed. Also, individuals with higher education stand better chances of securing decent jobs than those with lower or no education. These eventually generate the needed resources and power for social participation. This complements the assertion of Cornwall and Brock (2005) that adequate empowerment through such activities as education and training increases social participation, while the absence of meaningful empowerment reduces social participation. The result is also in harmony with Pettit (2012), who emphasised that meaningful participation and effective empowerment through, for example, education and training are complementary and, therefore, considered as both means and ends. It, further, confirms the finding of Feng, Cramm, Jin, Twisk and Nieboer (2020) that individuals with higher levels of education have a higher likelihood of social participation, compared to persons with lower educational attainments.

Compared to skilled persons, unskilled individuals are associated with a lower probability of social participation. From Table 16, unskilled

individuals are about 8.0 percent less likely to engage in social activities than their skilled peers, all other factors being equal, and it is significant at 5 percent. Skilled persons are mostly associated with better jobs and incomes than their unskilled counterparts. Like education, better employment and incomes are fundamentally meaningful sources of resources and empowerment for social participation. Generally, skilled persons tend to be more resourceful, empowered and powerful than those who are unskilled. This could principally explain why the skilled are associated with a higher probability of social participation than their unskilled peers.

Table 16: Unemployment duration on social participation

Social participation	Marginal effect	Standard Error.	P>z
Undur	-.002	.001	0.054
Hstat	.462	.050	0.000
Nch	-.0002	.012	0.985
Education (base=higher)			
None	-.055	.074	0.456
Basic	-.041	.057	0.467
Secondary	-.098	.052	0.060
cert/dip/hnd	-.110	.051	0.032
unskilled labour	-.080	.041	0.049
Female	-.025	.033	0.456
Age	.00002	.002	0.991
Rural	-.062	.054	0.250
Linc	-.038	.025	0.136
Employment status (base=paid employee)			
Self-employed with employee	.086	.049	0.078
Self-employed without employee	.093	.044	0.036
Others	.034	.056	0.542
Marital status (base=single)			
Married	.030	.044	0.497
Divorced/separated	.012	.063	0.852
Widowed	.113	.079	0.151
Region (base=Central)			
Greater Accra	.134	.052	0.009
Brong Ahafo	.280	.050	0.000
Upper East	.162	.098	0.098
N	575		
Link test	Coefficient	Std. Err.	p>|z|
_hat	.981	.087	0.000
_hatsq	.041	.095	0.670
Goodness-of-fit	Pearson chi2(538) = 551.30	Prob > chi2 = 0.3364	

Note: Marginal effect for factor levels is the discrete change from the base level.
Source: Adinkra-Darko (2021)

The employment status of the employed affects social participation in varied ways. Compared to paid employees, the self-employed with employee(s) have 0.086 higher probability of social participation and it is statistically significant at 10 percent (p-value=0.078). Likewise, individuals who are self-employed without employees have 0.093 higher likelihood of social participation than their paid-employee counterparts, and it is significant at 5 percent (p-value=0.036).

This means individuals who do their own work have better social participation than those who work for pay since being a paid employee comes with some level of regulation. The self-employed appear to have better social participation than the paid employees because the former owns the businesses, and often have more flexibility in their time schedules than the latter. The finding lends support to Turcotte and Gaudet (2013), who showed that full-time employees have a lower likelihood of social participation than even unemployed individuals. Also, persons in the 'others' category of employment status including contributing family members and casual workers have an insignificant but higher probability (0.034) of social participation compared to paid employees.

Regions of residence have different effects on social participation. Among the four regions (Central, Greater Accra, Brong Ahafo and Upper East) covered in this study, Central Region is associated with a lower likelihood of social participation relative to the others. For instance, individuals living in Greater Accra Region have 0.134 higher probability of social participation than those in Central Region and it is significant at 1 percent. Also, residents in the Brong Ahafo Region have 0.280 higher chances

than those in the Central Region to socially participate, at 1 percent significance. Again, residents in the Upper East Region have 0.162 higher probability of social participation compared to those in Central Region and it is significant at 10 percent, as shown in Table 16.

Although statistically insignificant (p-value=0.250), rural residents have a lower likelihood of social participation compared to residents in urban areas. Individuals living in rural areas have 0.062 lower probability than those in urban areas to socially participate. As indicated in Table 16, age has no significant effect on social participation. In terms of sex, the results indicate no statistically significant difference between males and females regarding the probability of social participation but the sign is negative for females. Income (*linc)* has an insignificant negative effect on the likelihood of social participation. Concerning marital status, individuals who are married, divorced, separated or widowed have a higher likelihood of social participation than those who have never married (single). The results exhibit that married, widows, divorced or separated spouses have higher probabilities of social participation than singles. However, none is statistically significant.

Effect of Unemployment Duration on Social Participation: Gender and Locational Analyses

The study further analysed the effect of unemployment duration on social participation, focusing on gender and locational dimensions. The results are presented in Models 1 to 4 of Table 17. Thus, Model 1 is on the effect of unemployment duration on social participation among females only while Model 2 is for males only; Model 3 is for urban only and Model 4 is for rural only.

From Table 17, it is observed that an increase in unemployment duration is more likely to decrease the social participation of people regardless of sex and locality. For instance, increasing unemployment duration by one more month decreases the probability of social participation by 0.005 among rural residents and it is statistically significant at 5 percent. However, an increase in unemployment duration by one month has an insignificant negative effect on the social participation of both sexes, as well as people residing in urban areas.

In Ghana, there is an absence of social protection schemes such as unemployment compensation for the unemployed. Therefore, individuals who are unemployed or jobless tend to lack the needed resources to aid them to participate socially, irrespective of their sex and residential status. This could largely explain the identified negative effect of unemployment duration on social participation of men and women, and both urban and rural residents, though in some cases, it is not significant (both sexes and urban residents). This result confirms a finding of Pohlan (2018), which revealed a profound detrimental effect of longer unemployment duration on the social integration of individuals.

As shown in Table 17, perceived good health status also termed self-rated good health has a significant positive effect on social participation for both sexes and localities. For instance, females who rate themselves as having good health status are about 33.3 percent more likely of social participation compared to their counterparts who rate themselves otherwise and it is significant at 1 percent, as presented in column 2. Likewise, males who perceive themselves as having good health have 0.381 higher probability of

social participation than their peers who do not perceive themselves as such, at 1 percent significance (see column 4).

Again, individuals who live in urban areas and self-rate themselves as being healthy are associated with 0.347 higher probability of social participation than urban residents who do not associate themselves with good health, and it is significant at 1 percent (column 6). For rural areas, individuals who identified themselves as healthy have 0.120 higher probability to participate in social activities compared to their equals who perceive themselves otherwise, at 10 percent significance (column 8).

The implication is that health status is a key determinant of social participation regardless of sex and residential status. This affirms the result of Lee, Jang, Lee, Cho and Park (2008), who established a positive effect of self-rated good health status on social participation for both males and females. It also confirms the findings of Leone and Hessel (2016) that self-rated health status increases the probability of social participation. This finding implies meaningful public and private investments in the infrastructure and other resources in the healthcare sector to make quality healthcare services and delivery accessible and affordable to all.

The number of children less than the age of 10 years (*Nch)* has alternating effects on social participation across sexes and localities. As presented in Table 17, an increase in the number of children below age 10 years has a negative but insignificant effect on social participation among females (column 2) but has an insignificant positive effect on social participation among males (column 4). In the urban areas, an increase in the

number of children below age 10 has an insignificant positive effect on social participation in the urban area (column 6).

However, in rural areas, an increase in the number of children less than age 10 years by one decreases the probability of social participation by 0.099 and it is significant at 1 percent (column 8). The seeming absence of pre-schools such as creches, nurseries, and kindergarten, coupled with low incomes in rural areas, burdens parents with the responsibility of physically caring for their children, which potentially reduces their likelihood of social participation. This is consistent with Feng et al. (2020), who argued that living with younger people such as children reduces the chances of social participation. The probability of participation could be much lower for rural women than for the men.

Educational attainments have different effects on social participation among individuals. Educational attainments have positive effects on social participation among females. For instance, females who have certificate, diploma or HND qualifications are associated with 0.230 lower probability of social participation compared to females with higher education and it is significant at 1 percent (column 2). For males, levels of education have positive but insignificant effects on social participation (column 4).

Also, in urban areas, levels of education have insignificant positive effects on social participation (column 6) but in rural areas, education has a significant negative effect on social participation. For example, in rural areas, basic education holders have 0.445 higher probability of social participation than their peers with higher education and it is significant at 10 percent (column 8). Educational attainment in Ghana is generally low, particularly in

rural areas. Therefore, the few rural residents with higher educational qualifications most often see themselves as belonging to a different class, which negatively affects their social participation in the rural areas.

Unskilled individuals have lower chances of social participation than those who are skilled, irrespective of sex and locality. As depicted in Table 17, unskilled females have 0.138 lower probability of involving in social participation compared to their skilled peers, and it is significant at 5 percent (column 2). For males, those unskilled have an insignificant lower probability (-0.038) of social participation than those who are skilled (column 4).

In the urban areas, unskilled persons have 0.126 lower probability to involve in social participation relative to their counterparts who are skilled and it is significant at 1 percent (column 6). In rural areas, unskilled persons are associated with an insignificant lower probability (-0.021) of social participation than their counterparts who are skilled (column 8). Unskilled people are, generally, engaged in informal jobs with low pay, which negatively affects their capacity and the likelihood of social participation compared to their peers who are skilled and have the resources.

In urban areas, Table 17 provides that females have a higher but insignificant probability of social participation than males (column 6). On the contrary, females in rural areas are about 20.8 percent less likely to have social participation than their male counterparts and it is significant at 5 percent (column 8). In rural areas, household chores such as cooking, fetching water, washing, cleaning, and taking care of children are basically women's duties. These essential responsibilities of females towards the family largely preclude them from many social activities relative to their male peers. This could, in

part, contribute to the lower chances of social participation by females than males in rural areas. The probability of participation for females could further reduce as the number of children increases, holding all other factors constant.

Table 17: Effect of unemployment duration on social participation (gender and locational analyses)

Social participation	Mode l1: Female		Model 2: Male		Model 3: Urban		Model 4: Rural	
	M.E.	Std. Err.	M.E.	Std. Err.	M.E.	Std. Err.	M.E.	Std. Err.
Undur	-.002	.002	-.002	.001	-.002	.001	-.005**	.002
Hstat	.333***	.053	.381***	.035	.347***	.029	.210*	.115
Nch	-.012	.020	.024	.016	.006	.014	-.099***	.036
Education (base=tertiary)								
None	.093	.139	-.126	.084	-.049	.075	.160	.285
Basic	-.018	.104	-.063	.080	-.047	.065	.445*	.243
Secondary	-.059	.101	-.099	.065	-.083	.057	.041	.174
cert/dip/hnd	-.230***	.087	-.026	.063	-.086	.052	.029	.172
unskilled labour	-.138**	.064	-.038	.049	-126***	.040	-.021	.132
Female	-	-	-	-	.015	.035	-.208**	.105
Age	-.001	.004	-.0002	.003	-.00003	.003	-.006	.008
Rural	-.105	.072	.037	.071	-	-	-	-
Lincome	-.046	.040	-.041	.031	-.050*	.026	.100	.072
Employment Status (base=paid employee)								
Self-employed with employee	.030	.103	.126*	.069	.083	.061	-.117	.198
Self-employed without employ	.110	.084	.075	.057	.068	.048	.198	.162
Others	.183**	.092	-.068	.063	.014	.053	-.036	.197
Marital status (base=single)								
Married	-.100	.072	.013	.054	-.015	.047	-.319**	.140
Divorced/separated	.0110	.107	-.086	.081	-.040	.069	.160	.166
Widowed	.091	.117	.050	.153	-.097	.099	0	Empty
Region (base=Central)								
Greater Accra	.141*	.079	.131**	.057	.311***	.061	0	Empty
Brong Ahafo	.326***	.084	.238***	.071	.159***	.046	.374***	.135
Upper East	.245	.157	.096	.096	.181**	.090	0	Empty
N	238		337		485		90	

Note: M.E. is marginal effect, Std. Err. is the standard error. M.E. for factor levels is the discrete change from the base level. * p<0.1, ** p<0.05, *** p<0.01.
Source: Adinkra-Darko (2021)

Unexpectedly, income has a negative effect on social participation for both sexes, and in urban areas. However, its effect among rural residents is positive, as anticipated, but insignificant. With the exception of urban areas, the effect of income on social participation is statistically insignificant. In urban areas, a percentage increase in income decreases the probability of

social participation by 0.050 and it is significant at 10 percent. Contrary to this, income is expected to promote social participation among individuals.

The identified negative effect of income on participation could be blamed on the growing insecurity in Ghana, particularly in the urban areas. Security and safety issues are becoming issues of concern to many in recent times. Therefore, instead of people improving their social participation in the midst of growing income, they rather reduce their involvement in social activities as a safety and security measure.

Also, the emergence of the COVID-19 pandemic and its difficult but necessary containment measures such as the closure of schools, social distancing, and the ban on public gatherings, sporting events, and many social activities also affected the opportunities for participation, especially in urban areas. This is contrary to the finding of Feng et al. (2020) that in China, individuals who belong to the highest income category are about twice more likely to socially participate than those from the least income bracket, hence a direct association between income levels and social participation.

Employment status has different effects on social participation as evidenced in Table 17. Using paid employees as the reference category, then among females, others (contributing family workers, domestic workers, and apprentices) have 0.183 higher probability of social participation, and it is significant at 5 percent. The self-employed with employees and those without employees have insignificant but higher probabilities of participation than the paid employees. With males, the self-employed with employees have 0.126 higher likelihood of social participation than the paid employees, at 10 percent significance.

The implication is that males who do their own businesses have the luxury of time which allows them to engage in some social activities relative to those who work for others (paid employees). However, the status of employment such as self-employed has an insignificant effect on social participation among females. In the urban areas, the individuals who are self-employed or have other employment statuses (others) have insignificant chances of social participation compared to the paid employees. In rural areas, employment status has no significant effect on the probability of social participation.

Marital status has varying effects on social participation, using the singles (never married) as the reference group. Almost all the components of marital status have insignificant effects on social participation among both sexes and also in both urban and rural areas, except for the category that is married and in the rural areas. That is, in the rural areas, those who are married have 0.319 lower probability of social participation, compared to those who are single, and it is significant at 5 percent.

Married people often have responsibilities towards their households and families regarding the provision of basic needs, and physically caring for their children or younger members of the household, among others. These could affect their chances of engaging in social activities, compared to the singles. Moreover, in rural areas, some married persons, especially women may need the permission of their spouses before they could engage in some social activities. Also, the general decline in the *Ndoboa* system of farming is affecting social participation among rural residents who are predominantly farmers.

Comparing other regions to the Central Region, it is realised that people in Greater Accra, Brong Ahafo, and Upper East Regions have higher probabilities of social participation, though some are statistically insignificant, as shown in Table 17. Thus, compared to females in the Central Region, females in Greater Accra have 0.141 higher probability of social activities and it is significant at 10 percent. Also, females in the Brong Ahafo Region are associated with 0.326 higher probability than their counterparts in the Central Region to engage in social events and it is significant at 1 percent.

Again, females in the Upper East Region have insignificant but higher chances (0.245) of participation than those in the Central Region. For males, those in Greater Accra have 0.131 higher probability to involve in social activities compared to their counterparts in the Central Region and it is significant at 5 percent. Also, males in the Brong Ahafo Region are about 23.8 percent more likely of social participation than those in the Central Region and it is significant at 1 percent.

In terms of locality, urban residents in Greater Accra have 0.311 higher probability to participate in social activities than their peers in the Central Region at 1 percent significance. Likewise, urban residents in the Brong Ahafo Region have 0.159 higher probability of social participation than urban dwellers in the Central Region and it is also significant at 1 percent. People in urban areas of the Upper East Region have 0.181 higher probability of participation than urban residents in the Central Region and it is significant at 5 percent. In the rural areas, residents in the Brong Ahafo Region have 0.374 higher likelihood of social participation than rural residents in the Central Region.

Chapter Summary

This chapter has provided the results and discussions of the third empirical objective, which investigates the effect of unemployment duration on social participation. The results indicated that generally, unemployment duration decreases the probability of social participation, particularly in rural areas. Health status, number of children under age 10 years, educational attainment, type of labour, employment status, region of residence, income level, and marital status affect the likelihood of a person's engagement in activities that create opportunities for participation. However, the effect of each of these variables on social participation varies across sexes and localities. The next and last chapter provides the summary, conclusions, and recommendations of the study.

CHAPTER EIGHT

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Amidst numerous programmes and interventions rolled out by successive governments to address the employment challenge facing the country, particularly the youth and graduates, unemployment levels keep deteriorating with longer unemployment duration. This situation potentially affects victims of unemployment in diverse ways, including migration aspirations and poor social participation. Between 2006 and 2017, the unemployment rate in Ghana surged from 3.1 percent to 8.4 percent. This is expected to worsen with the outbreak of the covid-19 pandemic

Accordingly, many studies have been conducted by scholars and labour experts but they largely focused on the unemployment levels, causes, effects, and impacts with no attention to the duration of unemployment in Ghana. This study complements the extant studies on the unemployment situation in Ghana but deviates a bit by emphasising the duration aspect of unemployment. Moreover, similar studies focused on unemployment duration and its determinants in different countries but failed to consider the joint effect of migration status and educational attainment. This study, therefore, examines individual-specific determinants of unemployment duration, with emphasis on the joint effect of migration status and educational attainment, and the effects of unemployment duration on an individual's migration intention, and social participation in Ghana. This final chapter offers the summary, conclusions, and recommendations of the study, as well as areas for further studies.

Summary

The study examines unemployment duration, migration intention, and social participation with evidence from four administrative regions in Ghana. Specifically, the study aims to: (a) determine individual-specific factors that influence unemployment duration with special reference to the joint effect of migration status and educational attainment, (b) examine the effect of unemployment duration on an individual's migration intention, and (c) investigate the effect of unemployment duration on social participation. The study employs primary data and a quantitative approach for the analyses.

The first empirical objective evaluates the research questions: (1) "what individual-specific factors influence unemployment duration in Ghana?" and (2) How do migration status and educational attainment jointly influence unemployment duration in Ghana? The study addresses these questions by running two separate models, where one examines the effects of individual-specific characteristics on unemployment duration, and the other focuses on the joint effect of migration status and educational attainment on unemployment duration. With a sample of 575 study participants, the analysis is conducted within the frameworks of the job search and the human capital theories, using the semi-parametric Cox regression and Cox proportional hazard models to determine the effects of individual-specific factors on unemployment duration, as well as the joint effect of migration status and educational attainment on unemployment duration.

The findings show that among the study regions, residents in the Upper East Region suffer a longer unemployment duration, followed by those in Greater Accra, Brong Ahafo, and Central Regions. Unemployment duration is

longer in urban areas than in rural areas. Females tend to suffer a longer duration of unemployment relative to males. Individuals who are married experience relatively longer unemployment duration compared to their single peers. Persons with higher educational attainments are associated with a shorter duration of unemployment than those with lower educational attainments. Moreover, unemployment duration is shorter for migrants than for non-migrants. Again, unemployed individuals who receive financial support have a longer unemployment duration than those who do not have access to financial support.

Generally, on the factors that influence unemployment duration, the results of the Cox regression and the Cox proportional hazards models reveal that young people, locality (urban), access to alternative incomes, and lower educational attainments are associated with lower hazard rates and longer unemployment duration, whereas social networks, being a migrant, and higher educational attainments independently increase hazard rates and reduce unemployment duration. On the joint effect of migration status and educational attainment on unemployment duration, the study presents that migrants with higher education are associated with higher hazard rates and shorter unemployment duration relative to migrants with lower educational attainments, and non-migrants regardless of their educational attainments.

With the second empirical objective, the focus is to investigate the effect of unemployment duration on migration intention. This study tests the hypothesis that unemployment duration does not affect migration intention. Using individual-level data for a sample of 575 respondents, the study employs the probit model and the neoclassical theory of migration, and the

human capital theory of migration to investigate the effect of unemployment duration on migration intention. The analysis is also performed based on gender and locality.

The study findings indicate that, generally, unemployment duration has an insignificant positive effect on migration intention, but it significantly increases the likelihood of migration intention for both males and females. The findings also reveal that holders of various educational qualifications have higher probabilities of migration intentions than individuals with no educational qualification. Perceived better wage elsewhere increases the possibilities of migration intention, regardless of sex and locality. Desire to mitigate poverty promotes migration aspirations generally, and of females and in urban areas. Rural residents and females are associated with probabilities of migration intention. Consideration of cost of migration promotes individuals' migration aspirations irrespective of sex and in urban areas. It is observed that variables such as age, and access to economic and social infrastructure decrease the likelihood of migration intentions in general, and for both sexes and in urban areas. Lastly, social networks generally reduce the chance of migration intentions but increase the likelihood of migration aspirations for females and urban residents.

As part of investigating the effect of unemployment on society, the third empirical objective seeks to assess the effect of unemployment duration on social participation. The assessment is done using the probit model and a sample of 575 observations. The analysis is driven by the empowerment in participation theory. The study further examines how unemployment duration affects social participation across genders and localities.

The findings show that unemployment duration diminishes the likelihood of social participation, in general, and particularly in rural areas. Individuals who perceive or self-rate themselves to be in a good health are more likely to have social participation than their peers who do not consider themselves as such, regardless of locality and sex. In rural areas, every additional child of a parent reduces the probability of social participation by 0.10. Compared to the higher education holders, persons with secondary education qualification, and certificate, diploma or HND are associated with 0.10 and 0.11 lower probability of social participation respectively. For males, those with certificate, diploma or HND qualifications have 0.23 lower chance of social participation, relative to their counterparts with higher education. However, among rural residents, those with basic education stand about 0.45 higher probability of social participation than those with higher education.

The findings also present that, unskilled persons are associated with a 0.08 lower likelihood of participation compared to their skilled peers. Unskilled females have about 0.14 lower probability of social participation than skilled females. In urban areas, unskilled persons record 0.13 lower chance of participation relative to their skilled counterparts. In rural areas, females are about 21 percent less likely to socially participate than their male peers.

The findings further establish that in urban areas, a percentage increase in income diminishes the probability of social participation by 5 percent. Compared to paid employees, the self-employed with employees and the self-employed without employees have higher chances of social participation. For males, self-employed with employees have about a 13 percent higher

probability of social participation than paid employees. Married people living in rural areas are about 32 percent less likely to socially participate than their single counterparts. Lastly, compared to Central Region, residents in Greater Accra, Brong Ahafo, and Upper East Regions are associated with higher probabilities of participation, particularly in urban areas. For both sexes, residents of Greater Accra and Brong Ahafo again are associated with a higher likelihood of social participation than those in Central. In rural areas, residents in Brong Ahafo are more likely to socially participate, compared to those in the Central.

Conclusions

The outcome of this thesis provides information to augment the existing studies on the unemployment situation in Ghana. The findings of this study present individual-specific factors that influence unemployment duration, the joint effect of migration status and educational attainment on unemployment duration, as well as the effect of unemployment duration on an individual's migration intention and social participation.

Following the findings of the first objective, the study concludes that young people, locality (urban), access to alternative income, and lower educational attainments are associated with longer unemployment duration. Also, migration (migrant), social networks, and higher educational attainment independently reduce unemployment duration. The effect of reservation wage on the duration of unemployment is found to be contrary to the expected. Thus, unemployment duration is expected to increase with reservation wage, but the finding indicates that higher reservation is associated with shorter unemployment duration. This could imply that people do not enforce their

reservation wages. They tend to accept employment offers at wage rates lower than their reservation wages, hence, an unexpected inverse association between reservation wage and unemployment duration. Moreover, education and migration jointly reduce unemployment duration.

For the second objective, the study concludes that though unemployment duration has an insignificant positive effect on migration intentions, in general, it positively influences the migration intentions of both males and females. The study also concludes that education increases the migration aspirations of individuals, especially in urban areas. Again, the study concludes that age, and access to economic and social infrastructure decrease intentions to migrate, for both sexes and in urban areas. Rural residents are more prone to migration intentions than their peers in urban areas. Perceived better wages elsewhere influence the intentions to migrate for both sexes and in both areas. Furthermore, social networks reduce migration aspirations but increase the aspirations among females and in urban areas.

On the third objective, the study concludes that unemployment duration negatively affects social participation, particularly in rural areas. The study again concludes that perceived/self-rated good health status positively influences social participation, regardless of sex and locality. Also, levels of education increase social participation. Moreover, the study concludes that unskilled persons are associated with lower social participation relative to skilled persons, especially among females and in urban areas. The study further concludes that self-employed individuals tend to have higher/better social participation than paid employees. For rural residents, females have lower social participation than their male counterparts. Lastly, of the study

regions, Central Region has lower social participation compared to all the other regions.

Recommendations

Premised on the findings and conclusions of the study, the following recommendations are provided:

In the first place, the study encourages young people to take up voluntary services and other forms of industry attachments to build labour market experience.

Again, the government through the Ministries of Education, Trade and Industry, and Employment and Labour Relations should develop and implement a policy on industrial attachment and internship programmes for tertiary students. This will connect the students to the industrial sector to enable them to build relevant labour market experiences, social capital, and more importantly, develop entrepreneurial skills.

The study also entreats individuals to build and effectively utilise their social networks to reduce the waiting time for employment. Furthermore, individuals who receive financial support while unemployed should leverage such income to intensify their job search efforts and activities to increase their hazard rates for exiting unemployment.

The study recommends that individuals should take advantage of the opportunities created in the educational sector in enhancing access to higher education to upgrade their educational levels.

The study further encourages job seekers with higher education to migrate as part of their job search to increase the chances of employability and shorten the unemployment duration.

Moreover, the government should take steps to build more economic and social infrastructure, especially in rural areas.

Last but the least, the study implores individuals to engage in good health practices and lifestyles to enhance their health stock for effective social participation.

Suggested Area for Further Studies

In line with the limitation of this study, the study suggests that further studies be conducted in this area by employing longitudinal data and using either the same semi-parametric Cox regression and Cox proportional hazard models or the other survival analysis such as the non-parametric and the parametric models. Again, the study suggests further investigations into the covariates of unemployment duration based on gender and locality analyses. Lastly, nationwide data should also be employed to assess the effect of unemployment duration on migration intention and social participation.

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APPENDICES

A: Correlation Matrix for First Empirical Objective

Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) age	1.000									
(2) rwag	0.264	1.000								
	(0.000)									
(3) hsize	0.096	0.023	1.000							
	(0.005)	(0.499)								
(4) sex	-0.043	-0.095	0.042	1.000						
	(0.219)	(0.006)	(0.224)							
(5) mstat	0.588	0.129	0.141	0.090	1.000					
	(0.000)	(0.000)	(0.000)	(0.009)						
(6) loc	-0.030	-0.035	0.076	0.064	0.047	1.000				
	(0.383)	(0.314)	(0.028)	(0.064)	(0.176)					
(7) snet	0.143	0.002	0.081	0.135	0.181	0.063	1.000			
	(0.000)	(0.956)	(0.020)	(0.000)	(0.000)	(0.068)				
(8) alt_income	0.040	-0.096	-0.013	0.037	-0.016	0.112	0.058	1.000		
	(0.253)	(0.005)	(0.698)	(0.289)	(0.648)	(0.001)	(0.092)			
(9) migrant	-0.077	-0.073	0.124	-0.016	0.016	0.053	-0.154	0.041	1.000	
	(0.025)	(0.036)	(0.000)	(0.637)	(0.646)	(0.129)	(0.000)	(0.237)		
(10) educ	-0.053	0.336	-0.093	-0.100	-0.151	-0.029	-0.270	-0.004	-0.021	1.000
	(0.123)	(0.000)	(0.007)	(0.004)	(0.000)	(0.396)	(0.000)	(0.907)	(0.550)	

B: Correlation Matrix for Second Empirical Objective

Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) undur	1.000											
(2) educ	-0.092	1.000										
	(0.027)											
(3) bwage	0.083	-0.171	1.000									
	(0.047)	(0.000)										
(4) mpov	0.044	-0.117	0.555	1.000								
	(0.296)	(0.001)	(0.000)									
(5) hsize	0.054	-0.093	0.095	0.044	1.000							
	(0.195)	(0.007)	(0.006)	(0.201)								
(6) loc	0.123	-0.029	0.107	-0.042	0.076	1.000						
	(0.003)	(0.396)	(0.002)	(0.230)	(0.028)							
(7) age	0.096	-0.053	0.264	0.221	0.096	-0.030	1.000					
	(0.022)	(0.123)	(0.000)	(0.000)	(0.005)	(0.383)						
(8) com	0.010	-0.132	0.411	0.333	0.037	0.032	0.274	1.000				
	(0.813)	(0.000)	(0.000)	(0.000)	(0.291)	(0.363)	(0.000)					
(9) snet	0.107	-0.030	-0.033	0.073	0.015	-0.130	-0.049	-0.174	1.000			
	(0.011)	(0.391)	(0.344)	(0.034)	(0.655)	(0.000)	(0.154)	(0.000)				
(10) mstat	0.100	-0.151	0.280	0.218	0.141	0.047	0.588	0.179	-0.025	1.000		
	(0.017)	(0.000)	(0.000)	(0.000)	(0.000)	(0.176)	(0.000)	(0.000)	(0.473)			
(11) sex	0.047	-0.100	0.087	0.052	0.042	0.064	-0.043	0.022	0.087	0.090	1.000	
	(0.259)	(0.004)	(0.011)	(0.134)	(0.224)	(0.064)	(0.219)	(0.529)	(0.012)	(0.009)		
(12) infrast	-0.060	-0.092	-0.159	-0.218	0.102	0.372	-0.168	-0.164	-0.248	-0.047	-0.079	1.000
	(0.149)	(0.008)	(0.000)	(0.000)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(0.178)	(0.023)	

C: Correlation Matrix for Third Empirical Objective
Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) undur	1.000											
(2) hstat	0.146	1.000										
	(0.000)											
(3) nch	0.058	-0.051	1.000									
	(0.162)	(0.142)										
(4) educ	-0.092	-0.052	-0.205	1.000								
	(0.027)	(0.131)	(0.000)									
(5) lab	0.079	0.156	0.099	-0.461	1.000							
	(0.058)	(0.000)	(0.010)	(0.000)								
(6) sex	0.047	0.054	0.037	-0.100	0.071	1.000						
	(0.259)	(0.117)	(0.292)	(0.004)	(0.065)							
(7) age	0.096	-0.060	0.666	-0.053	-0.001	-0.043	1.000					
	(0.022)	(0.082)	(0.000)	(0.123)	(0.988)	(0.219)						
(8) loc	0.123	-0.222	0.095	-0.029	0.085	0.064	-0.030	1.000				
	(0.003)	(0.000)	(0.006)	(0.396)	(0.026)	(0.064)	(0.383)					
(9) income	0.078	0.208	0.221	0.210	-0.081	-0.058	0.343	-0.163	1.000			
	(0.061)	(0.000)	(0.000)	(0.000)	(0.036)	(0.093)	(0.000)	(0.000)				
(10) e. status	-0.103	-0.039	0.044	-0.400	0.192	0.020	-0.028	-0.042	-0.144	1.000		
	(0.013)	(0.347)	(0.295)	(0.000)	(0.000)	(0.624)	(0.509)	(0.315)	(0.001)			
(11) m.status	0.100	-0.015	0.617	-0.151	0.119	0.090	0.588	0.047	0.211	-0.008	1.000	
	(0.017)	(0.662)	(0.000)	(0.000)	(0.002)	(0.009)	(0.000)	(0.176)	(0.000)	(0.839)		
(12) region	0.314	-0.225	-0.027	-0.168	0.164	0.022	-0.061	0.214	-0.262	-0.031	-0.028	1.000
	(0.000)	(0.000)	(0.435)	(0.000)	(0.000)	(0.532)	(0.079)	(0.000)	(0.000)	(0.463)	(0.422)	

D: Data collection instrument (Questionnaire)

UNIVERSITY OF CAPE COAST

SCHOOL OF ECONOMICS

DEPARTMENT OF ECONOMICS STUDIES

QUESTIONNAIRE

INFORMATION TO BE READ TO THE RESPONDENTS:

My name is ----------. I am here on behalf of Edmund Adinkra Darko, a Ph.D. student of the Department of Economics Studies, University of Cape Coast. He is undertaking a study on **Unemployment duration, migration intention and social participation in Ghana. Y**ou have been selected to participate in the study. We promise that your responses will be treated with strict confidentiality. An estimated 30-40 minutes will be required to complete the questionnaire. Your participation in this study is entirely voluntary. You may withdraw yourself from it at any time without a penalty.

Please, are you willing to participate in the study? Yes ☐ **No** ☐

Please complete appropriately (circle or fill in the space provided where applicable)

Region	District	Cluster	Household ID	Respondent ID

Date of Interview: …… Start Time…… End Time: ……..……

In the ensuing sections, we will ask you a couple of questions, please provide your candid responses.

SECTION I: Demographic/background data on the respondent

1. Sex Male..1 Female..2	2. Age (completed years)	3. Marital status Never married….1 Married…..2 Divorced/separated. 3 Widowed……4	4. Religion Christian…….1 Muslim……..2 Traditionalist..3 Other……...4	5. Ethnic group Akan ……..1 Ga Dangme..2 Ewe ……3 Guan …….4 Gurma ….5 Mole-Dagabni…6 Grusi ..7 Mande…8 Other....9	6. Locality Urban 1 Rural 2

7. Number of children below age 10 years	8. House-hold size.	9. Housing arrangement/ homeownership Owner occupied.1 Family house ….2 Rented house...3 Live with someone.....4	10. Have you ever attended school? Yes...1 No....2 (>>15)	11. Number of years of schooling	12. Highest educational attainment None……..…1 Kindergarten… 2 Primary……..3 JSS/JHS…….....4 Middle…….5 O/A Level……6 SSS/SHS……..7 Voc/Tech/Comm.. 8 TeacherTraining/ Agric/Nursing Cert/DBS…..…..9

					Post Sec. Dip (HND, Teacher training, Nursing, Uni. Dip)……..10 Bachelor degree …11 Post graduate..12

13. Type of school/institution in which the highest qualification was attained.	14. What course did you read?	15. Have you ever worked for pay or family gains?	16. What kind of work have you done for most of your life?
Public…….....1 Private ……...2 Foreign…….3	Business ……1 Science ……..2 Gen. Arts ……3 Voc/Tech/Com……4 Education ……..5 Humanities……....6 Biological science..7 Physical science…..8 Agric. Science ……9	Yes ……1 No ….2 (>>19)	Professional/Technical.....1 Administrative/Managerial…2 Clerical.....3 Sales.....4 Service.....5 Agric/Ani. Husbandry/ Forest/fishing/hunting.....6 Production & related work....7 Workers NEC.....8 Homemaker.....9 Other (specify).....10 Don't know.....11

17. How long have you worked? (in completed years)	18. What kind of effort does the work you do require? More mental than physical effort...1 More physical than mental effort....2	19. How many languages do you speak?

SECTION II: Information on parents

20. Father's highest educational attainment. None ……..1 Kindergarten...…..2 Primary...……..3 JSS/JHS .....4 Middle .....5 O/A Level ……6 SSS/SHS...……...7 Voc/Tech/Comm..8 TeacherTraining/Agric/Nursing Cert..9 Post Sec. Dip (HND, Nursing, Uni. Dip etc) ..…10 Bachelor degree .11 Post graduate .....12 Don't know.....13	21. What kind of work has your father done for most of his life? Professional/Technical…1 Administrative/Managerial..2 Clerical ……3 Sales ……4 Service ……5 Agr/Ani. Husb/est/fishing/hunting…..6 Production & related work ..7 Workers NEC …..…8 Homemaker ……9 other (specify).....10. Don't know ……...11	22. What kind of effort did/does your father's work require? More mental than physical effort.....1 More physical than mental effort……..2

23. Mother's highest educational attainment None ……...1 Kindergarten.....2 Primary ….....…3 JSS/JHS….....4 Middle .....5 O/A Level ……..6 SSS/SHS ……...7 Voc/Tech/Comm…8 TeacherTraining/Agric/Nursing Cert..……...9 Post Sec. Dip (HND, Teacher training, Nursing, Uni. Dip)…10 Bachelor degree …...11 Post graduate .....12 Don't know ..……...13	24. What kind of work has your mother done for most of her life? Professional/Technical.....1 Administrative/Managerial…2 Clerical..……..3 Sales.……....4 Service……..5 Agric/Ani. Husb/est/fishing/hunting.....6 Production & related work .....7 Workers NEC…….……8 Homemaker…….....9 other (specify).....10 Don't know...……..…11	25. What kind of effort did/does your mother's work require? More mental than physical effort…...1 More physical than mental effort …...2

SECTION III: Employment status

26. During the past 7 days, did you work for a pay either in cash or kind for someone who is not a member of your household for at least an hour? Yes.….1 (>>31) No……..2	27. Are you available for work, if there had been an opportunity to work? Yes …….1 No ……..2 (>>34)	28. Have you made any effort to find work or start own business? Yes ……1 No …….2	29. How long have you been available for work; or made effort to find work; or start own business?	
			Month(1)	Week(2)

30. What type of employment have you been mainly seeking and available for? Government…..1 Private firm (large)...2 Small/medium scale……..3 Self-employment..4 Any job…….5 **After this question**, (>>34)	31. What is the nature of employment engaged in? Permanent full-time...1 Permanent part-time..2 Temporary full-time..3 Temporary part-time...4	32. What is your status in this employment? Paid employee……....1 Self-employed with employee…….…...2 Self-employed without employee……..……..3 Contributing family worker ……...4 Casual worker…..…….5 Other (specify) …..…....6	33. How long did it take you to find/secure this job?	
			Months	Weeks

SECTION IV: Unemployment duration.

Economic factors

34. Did/do you receive support (cash) from friends, family members or any other person because you were/are unemployed? Yes ……1 No …….2	35. While unemployed did/do you earn income from alternative sources such as helping in family business? Yes ……1 No …….2	36. What is the lowest wage (monthly pay) at which you will accept a given job offer? **Amount (GHC)**

37. Does job advertisement help in getting information about job opportunities and eventual employment? Yes ……1 No……..2	38. Does the length of time an individual stay out of work makes it less likely for him/her to find job? Yes ……1 No……..2	39. Does automation of production processes affects or limits the number of job opportunities to individuals seeking for employment? Yes ……1 No……..2

Socio-cultural and political factors that affect unemployment duration

40. Do you have social network (friends, classmates, church members, family members, political alliance, club members) that provides you with information about available job opportunities? Yes ……1 No …….2	41. Are advertised jobs a mere formality because the employers already know whom they will employ? Yes ……1 No …….2	42. Do you have access to internet connectivity? Yes ……1 No …….2

SECTION V. Migration intention and its determinants

Statement	Yes ...1	No...2
43. Have you ever conceived an idea or intention to move to another town/community?		
44. Do you have an intention/desire to migrate to another geographical area with the belief of finding job?		
45. Do you ever think of leaving your community/town for a year or more?		
46. Do you currently live outside your community or town of origin temporary or permanently?		
47. Have you ever lived outside your community/town of origin temporary or permanently?		

Economic factors

For each of the following factors, indicate whether or not can influence your intention to migrate.

Factors	Yes1	No 2
48. Perceived chances of finding (better) jobs elsewhere.		
49. Perceived better wage/income elsewhere.		
50. Desire to mitigate poverty.		
51. Seasonality of employment.		
52. Prevailing high cost of living.		
53. Perceived high standard of living elsewhere.		
54. Existence of business opportunities elsewhere.		
55. Consideration of cost of migration i.e cost of movement, housing etc		
56. Flexibility of migration policies such as access to passport, visa, border regulations etc.		

Socio-cultural, political and natural factors

Statement:	Yes….1	No …2
57. Do you have access to better educational facilities and systems?		
58. Do you have access to good road infrastructure?		
59. Do you have access to good healthcare system and services?		
60. Do you have access to electricity (regular power supply)?		
61. Do you have access to potable water?		
62. Do you intend to migrate due to cultural practices in your community?		
63. Do social ties such as family and friends affect your decision to migrate to another community/town?		
64. Do you intend to migrate due to ethnic conflict in your community/town?		
65. Do you have any intention to pursue or participate in politics?		
66. Does the desire to enjoy rights and freedom affect decision to migrate?		
67. Do people migrate to be independent of family/parental control?		
68. Do you experience perennial flood in your community?		
69. Do you experience high average temperatures in your community?		
70. Do you observe rising sea levels in your community?		
71. Do you experience persistent drought or irregular rainfall in your community?		

SECTION VI: Social participation.

Statement	Yes ….1	No ..2
72. Do you engage in any activity that creates opportunities for interaction with people in the society eg. Sports, politics, religion, old students' meetings, clubs etc?		
73. Do you do voluntary work for an organisation or a group in the society?		
74. Do you help other people outside your household in the community/society?		

75. If Yes to 73, state the type(s) of voluntary work you do for organisations/groups

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76. If Yes to 74, state the type(s) of help you offer to people outside your household in the society……

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77. On the average how much do you spend in a month in general? **Amount (Ghc)** …….

Indicate whether or not the following factors influence individual's social participation.

Factors	Yes ….1	No…2
78. Do you value helping other people outside your households or volunteering for an organisation/group?		
79. Do you perceive yourself of having good health status?		

This part to be answered by respondents who are working/employed only

Travel time to work		**Work schedule**	
80. On the average, how long does it take you to and from work in a day?		81a. How many hours are you supposed to spend at your workplace in a day?	81b. How many hours do you actually spend at work in a day?
Hour	Minutes		

E: Ethical clearance letter

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

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IORG #: IORG0009096

C/O Directorate of Research, Innovation and Consultancy

3RD DECEMBER, 2019

Mr. Edmund Adinkra Darko
Department of Economics Studies
University of Cape Coast

Dear Mr. Darko,

ETHICAL CLEARANCE – ID (UCCIRB/CHLS/2019/30)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for the implementation of your research protocol titled **Unemployment Duration, Migration Intention and Social Participation in Ghana**. This approval is valid from 3rd December, 2019 to 2nd December, 2020. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD
UCCIRB Administrator

ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST