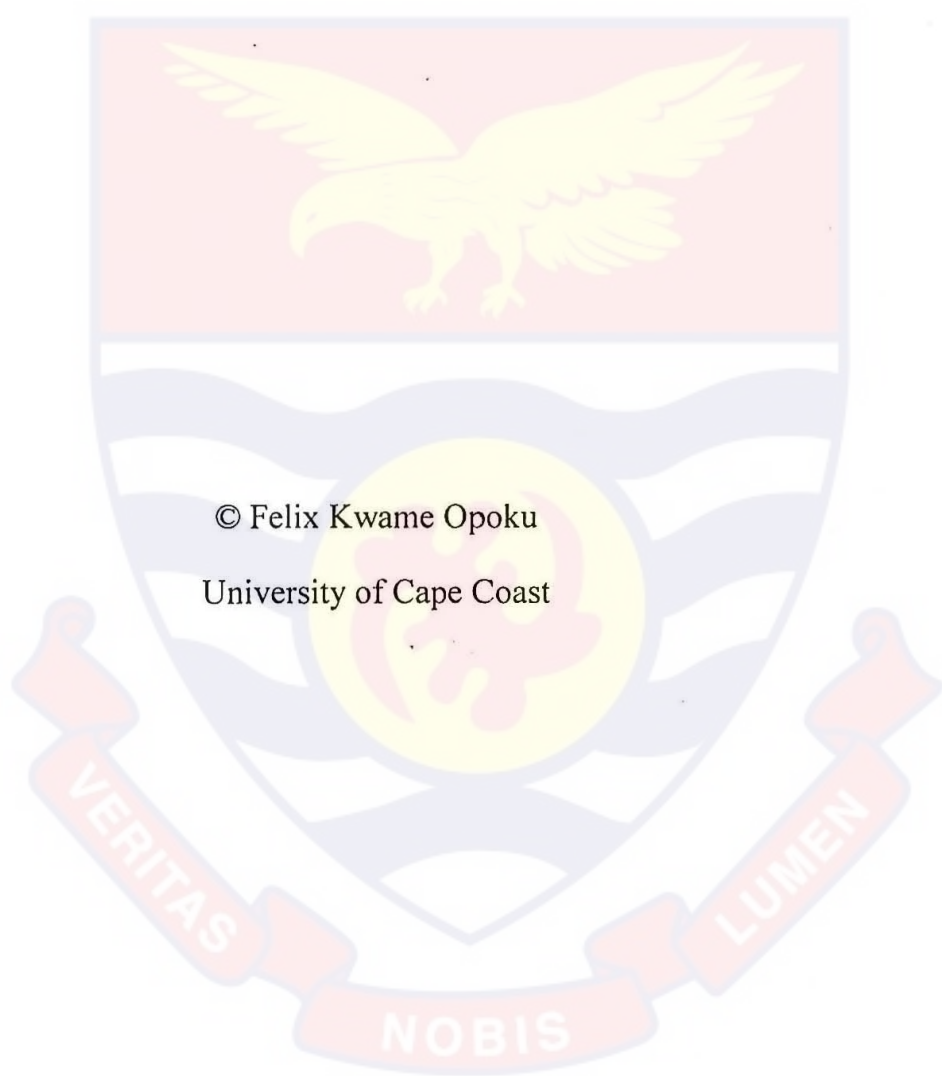




© Felix Kwame Opoku
University of Cape Coast

UNIVERSITY OF CAPE COAST

SOCIAL CAPITAL AND HUMAN RESOURCE DEVELOPMENT PRACTICE OF
SAWMILL FIRMS IN THE ASHANTI AND WESTERN REGIONS IN GHANA

BY

FELIX KWAME OPOKU

Thesis submitted to the Institute for Development Studies of the Faculty of Social Sciences,
College of Humanities and Legal Studies, University of Cape Coast in partial fulfillment of
the requirements for award of Doctor of Philosophy Degree in Development Studies

JANUARY 2017

SAM JONAH LIBRARY
UNIVERSITY OF CAPE COAST
CAPE COAST

Digitized by Sam Jonah Library

DECLARATION

Candidate's Declaration

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

Candidate's Signature:

Date: 12-01-2017

Name: FELIX KWAME OPOKU

Supervisors' Declaration

We hereby declare that the preparation and presentation of the 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: 12/01/17

Name: PROF. C. K. BROWN

Co-Supervisor's Signature:

Date: 12/01/17

Name: Prof. K. BARIMA ARTU

ABSTRACT

The main objective of the study was to examine the contribution of social capital to HRD practice in the sawmill industry in Ghana. The study adopted the positivist and interpretive philosophies, thereby blending the complementary strengths of both quantitative and qualitative methodologies. The quantitative data were gathered using survey questionnaires and interview schedules, and were analysed using both descriptive and inferential statistics. The qualitative data were also collected through an interview guide, and were analysed using the thematic data analysis technique. The major findings of the study were: most of the HRD practices in the sawmill industry were either informal or sub-standard as a result of constant interferences of Chief Executive Officers in the operation of the HR professionals; besides organising annual social events, most of the steps taken by top management to promote social capital in the HRD practice of firms in the industry were effectively carried out; and social capital has contributed immensely to HRD practice in areas, such as flow of information, resource exchange and combination, as well as support among staff in the sawmill industry in Ghana. It is recommended that, in order to leverage the potential contribution of social capital in the sawmill industry in Ghana, there is the need to shift from the traditional HRD practice that focused on developing the specific skills, knowledge, and abilities of individual employees towards a more integrative HRD practice, capable of transforming the traditional workplace into conducive learning environment through social networks, collaboration, support and knowledge sharing.

KEY WORDS

Human Resource Development

Social Capital

Networks

Human Resource Management

Sawmill Industry

Ghana Forestry Commission



ACKNOWLEDGEMENTS

It is with great appreciation that I acknowledge the contributions and support of my supervisors; Prof. C. K. Brown and Prof. K. Barimah Antwi, whose endless support, intellectual advice and encouragement contributed to the successful completion of this thesis. Words cannot express my gratitude for their timely and excellent contributions. In the same way, I will not forget my former co-supervisor, Prof. A. Britwum, for her guidance and support during the first two years of the program. Together, your time and effort assisted me throughout the study.

My sincere gratitude and appreciation also go to Prof. F. Enu-Kwasi for his comments and suggestions he made on each chapter of the thesis. His encouragements during those tough times were so meaningful. I will also use this opportunity to thank all the lecturers and supporting staff of the Institute for Development Studies in the College of Humanities and Legal Studies, University of Cape Coast, for their constant support, guidance and friendship. It was wonderful to interact with people who willingly, thoughtfully, and generously shared their experiences, ideas and values. I also appreciate the effort of my PhD colleagues who frequently asked me challenging questions, gave me guidance, and kept me on track.

Saving the most important appreciation for last, I thank my wife, Dora Opoku Badu, whose persistent love and generosity encouraged me during those days of schooling. Dear, by this achievement, your effort has not been in vain.

DEDICATION

To my parents,

Mr. Kwaku Donkor and Mrs. Abena Dwoanko



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
LIST OF ACRONYMS	xv
 CHAPTER ONE: INTRODUCTION	 1
Background to the Study	1
Statement of the Problem	9
Objectives of the Study	12
Research Questions	12
Scope of the Study	13
Significance of the Study	14
Organisation of the Thesis	15
 CHAPTER TWO: CONCEPTUAL AND THEORETICAL FRAMEWORK FOR HUMAN RESOURCE DEVELOPMENT PRACTICE	 17
Introduction	17
Definitions of Human Resource Development	17

Distinction between Human Resource Development and Human Resource Management	21
Concept of Capacity	23
Capacity Building	24
Effective Employee Capacity Utilisation	25
Models, Components and Competencies in Professional HRD Practice	26
Human Resource Development Practices	32
Theoretical Framework for Human Resource Development	41
Related Theories of Human Resource Development	47
Lessons Learnt from Review of Conceptual and Theoretical Literature	48
 CHAPTER THREE: CONCEPT OF SOCIAL CAPITAL AND SOCIAL NETWORK THEORIES	 50
Introduction	50
Concept of Social Capital	50
Defining Social Capital	52
The Origins of Social Capital	56
Key Dimensions of Social Capital	61
Criticisms of Social Capital	64
Social Capital and Demographic Characteristics of People	66
Tools for Measuring Social Capital	69
Theories of Social Networks	71

CHAPTER FOUR: EMPIRICAL STUDIES ON SOCIAL CAPITAL AND HUMAN RESOURCE DEVELOPMENT	75
Introduction	75
Social Capital for Creation of Human Capital	75
Social Capital as a Foundation for HRD Practice and Interventions	78
Applicability of Social Capital to HRD Practice	82
Social Capital as a Key to Organisational Success	86
Lessons Learnt from Empirical Review of Literature	88
Conceptual Framework for Social Capital and HRD Practice	89
CHAPTER FIVE: METHODOLOGY	93
Introduction	93
Research Philosophy	93
Study Area	98
Methodological Approach to the Study	102
Research Design	105
Study Population	107
Sampling Procedures	109
Sources of Data	112
Data Collection Methods	113
Data Collection Instruments	116
Pre-test of Data Collection Instruments	118
Fieldwork	120
Data Processing and Analysis	121
Ethical Considerations	123

CHAPTER SIX: THE SAWMILL INDUSTRY IN GHANA	125
Introduction	125
Nature of the Ghanaian Sawmill Industry	125
Marketing and Competitive Position of the Ghanaian Sawmill Industry	129
Contribution of Sawmill Industry to the Economic Development of Ghana	131
Government Interventions in the Sawmill Industry in Ghana	134
Regulatory Framework for the Ghanaian Sawmill Industry	138
The Voluntary Partnership Agreement and Sawmill Legality in Ghana	141
The Ghana Community Forest Committee (GCFC)	144
The Wood Industries Training Centre	146
Boosting the Resource Base of the Sawmill Industry in Ghana	147
Chainsaw Milling in Ghana	151
CHAPTER SEVEN: HUMAN RESOURCE DEVELOPMENT PRACTICE IN THE SAWMILL INDUSTRY IN GHANA	154
Introduction	154
Demographic Characteristics of HR Professionals	154
Recruitment and Selection Practices	156
Attraction and Retention Practices	164
Training and Development Practices	170
Appraisal Strategies and Practices	180
Reward Systems and Practices	183
Health and Safety Practices	186
Improving the Academic Qualification of Staff in the Sawmill Industry	188
Summary	189

CHAPTER EIGHT: SOCIAL CAPITAL FOR EFFECTIVE HRD	
PRACTICE IN THE SAWMILL INDUSTRY IN GHANA	192
Introduction	192
Demographic Characteristics of Managerial and Non-Managerial Staff	192
Promoting Social Capital in the Sawmill Industry in Ghana	199
Contribution of Social Capital to HRD Practice in the Sawmill Industry	217
Summary	228
CHAPTER NINE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	231
Introduction	231
Summary	231
Conclusions	238
Recommendations	241
Limitations of the Study	243
Contribution to Knowledge and Practice	244
Areas for Future Research	245
BIBLIOGRAPHY	246
APPENDICES:	
1. Interview guide for HR practitioners	279
2. Survey Questionnaires for Line Managers	281
3. Interview Schedules for Non-Managerial Employees	285

LIST OF TABLES

Table	Page
1 Distribution of Non-Managerial Staff in Registered Sawmill Firms in the Ashanti Region	108
2 Distribution of Non-Managerial Staff in Registered Sawmill Firms in the Western Region	109
3 Distribution of Non-Managerial Staff by Size of Firm	112
4 Distribution of Sawmill Firms in Ghana	129
5 Foreign Exchange Earned by Firms from Wood Export in Ghana	132
6 Laws and Regulations Defining Sawmill Legality in Ghana	142
7 Summary Statistics of Chainsaw Milling in Ghana	153
8 Age-Sex Distribution of Line Managers	194
9 Academic Qualification of Line Managers	195
10 Work Experience of Line Managers and Non-Managerial Staff	196
11 Age-Sex Distribution of Non-Managerial Staff	197
12 Academic Qualification of Non-Managerial Staff	198
13 Coordination of Activities of Individuals, Units and Departments	200
14 Employee Participation in Cross-Functional Teamwork	202
15 Treating Employees as the Most Valuable Asset of the Firm	203
16 Collaboration with Other Sawmill Firms in the Sawmill Industry	204
17 Adherence to Mutually Agreed Rules, Norms and Sanctions	206
18 Encouragement of Collective Problem Solving in the Industry	207
19 Provision of Avenue for Staff to Talk on Work-Related Issues	209
20 Informing Employees about Goals and Values of the Firm	211
21 Resolution of Disputes and Conflicts Among Employees	213

22	Creation of Strong Networks of Alliances with Competitors, Customers and Suppliers	214
23	Organisation of Annual Social Events	216
24	Sharing of Information Among Members	217
25	Exchange and Combination of Resources in the Sawmill Industry	219
26	Support Among Employees in the Sawmill industry	221



LIST OF FIGURES

Figure	Page
1 Social Capital and the Role of HRD Practice in Knowledge Sharing	81
2 Integrating HRD, EI,SC and OP	83
3 Conceptual Map of the Social Realm Relevant to HRD Practice	88
4 Conceptual Framework for Social Capital and HRD Practice	91
5 Map of Ghana Showing the Ashanti and Western Regions	101



LIST OF ACRONYMS



ABTS	Asuobomosadu Timbers, Sawmilling and Wood Processing Ltd
ANA	Actor Network Analysis
ASTD	American Society for Training and Development
BARADEP	Brong-Ahafo Regional Agricultural Programme
DfID	Department for International Development
DANIDA	Danish International Development Agency
EU	European Union
FCG	Forestry Commission of Ghana
FLEGT	Forest Law Enforcement, Governance and Trade
FORIG	Forestry Research Institute of Ghana
FPIB	Forest Products Inspection Bureau
FSD	Forest Service Division
GCFC	Ghana Community Forest Committee
GTMO	Ghana Timber Millers Organisation
HR	Human Resources
HRD	Human Resource Development
HRM	Human Resource Management
IDA	Individual Development Account
IRS	Industrial Regulation System
ITTO	International Tropical Timber Organisation
KIT	Knowledge Intensive Firm
LS	Legality Standards
LVS	Legal Verification System
ODA	Official Development Assistance

OECD	Organisation for Economic Cooperation and Development
OYCL	Oti Yeboah Complex Limited
R & D	Research and Development
SNA	Social Network Analysis
SPSS	IBM Statistical Product and Service Solution
TCA	Transaction-Cost Analysis
TEDB	Timber Export Development Board
TIDD	Timber Industry Development Division
TPO	Timber Protection Ordinance
UNDP	United Nations Development Programme
VLP	Validation of Legal Timber Programme
VPA	Voluntary Partnership Agreement
WITC	Wood industries Training Centre
WLP	Workplace Learning and Performance

CHAPTER ONE

INTRODUCTION

Background to the Study

Effective HRD practice requires social capital. This is informed by social network theories, particularly, the collective interest, social exchange and social cognitive theories which together facilitate the exchange of information, knowledge and other relevant resources among members in the organisation (Krebs, 2008). From a humble beginning spearheaded by economists, sociologists, psychologists and political scientists, social capital has now grown to become a vital ingredient in economic development, to the extent that it has captured the attention of various international bodies, including the World Bank which argued that social capital is the most critical element in ensuring the sustainability of community development (Ofori & Sackey, 2010; Wiesinger, 2007; Fine & Lapavitsas, 2004; Casper, 2000).

In much like other behavioural sciences, social capital is required in human resource development. Research has shown that social capital is the missing link in making fuller utilisation of human talent (Moliterno & Mahony, 2010; Hatala, 2006; Grootaert, 1996). Wachira (2010) confirmed this statement, adding that social capital enhances the adaptive capability of the workforce by ensuring the efficient and effective use of resources embedded in them. At the individual level, social capital facilitates personal goal achievement by ensuring that the individual obtains the needed information. At the organisational level, social capital helps members to have access to knowledge, information, and other relevant resources.

Social capital derives from social ties, which when activated can affect individual life outcomes and the capacity of a group to work together for shared goals (Flora, 2008). According to Hatala (2006), social capital improves organisational performance by enabling individuals to capture, share and apply their collective knowledge. It also improves the empirical rigour of human resource development in such areas as training and development, organisational development, leadership development, and organisational change (Moliterno & Mahony, 2010). Perhaps, the role of social capital in promoting economic development was empirically pioneered by Putnam (1993) who argued that the density and scope of local civic associations laid the foundations for a credible dissemination of information and social trust, thereby creating the conditions underlying effective governance and economic development.

The importance of social capital cannot be overemphasized, given that individuals live and work within groups, teams, departments, or business units in the organization. As noted by Glaeser (2005), organic human bodies become recognised as people because of their interaction with other people. Thus, without strong and effective social networks, partnerships, collaboration, interaction, integration and knowledge sharing, it will be difficult to transform the workplace into conducive learning environment as required in HRD and HRD practice. The recognition that social capital is an important resource that resides in credible interpersonal and inter-organisational relationships at the workplace has resulted in the need for a new approach to human resource development practice in recent times.

This line of thinking is shared by the US, Canada, Mexico and most other European countries. The traditional HRD which was practised in the context of the individual is gradually giving way for a new more strategic approach that focuses much more on the interdependencies and interrelations among the individuals in the organisation. As noted by Krebs (2008, p. 38), it is no longer sufficient to manage individual assets....the HR professional of the 21st century must manage inter-connected assets of the firm, and this means that the practitioner must focus on between-employee factors that combine to create new processes, products and services. In ensuring this, Krebs (2008) advised contemporary HRD practitioners to increasingly network and build trusting relationships for themselves and other employees, both within and outside the workplace, so as to obtain support, resources, information, and knowledge.

Putnam (2000) has offered four reasons why social capital is important for economic development: First, social capital allows citizens to resolve collective problems more easily (Fafchamp, 1996). This may act as a basis for collective action and decision-making aimed at the provision of public goods (Flora, 2008); provide an informal framework for sharing information (Grootaert, 1996); act as a basis for the efficient sharing of privately-owned resources (Brautigam, 1997); promote good governance (Putnam, 1993); and finally, reduce the “free rider” problems associated with public goods, social capital may improve the management of common resources and the maintenance of shared infrastructure (Serageldin, 1996).

Second, social capital greases the wheels that allow communities to advance smoothly. As people trust each other and are trustworthy, and because

they are subject to repeated interactions with one another, everyday business and social transactions are less costly. According to Fafchamp (1996), social capital may reduce transactional costs, particularly in communities where formal market regulating institutions are non-existent (Fafchamp, 1996).

Third, by widening the awareness of the many ways in which the faith of members of a community are linked together, social capital improves the lot of communities. When people lack connection to others, they are unable to test the veracity of their own views, whether in a give-or-take casual conversation or in a more formal deliberation (Putnam, 2000).

Finally, the networks that constitute social capital serve as conduits for the flow of helpful information that facilitates personal goal achievement at the individual level. At the level of the organisation, social capital has been recognised as an additional vehicle through which organisational members can have access to knowledge, information, and other resources in the organisation (Krebs, 2008). This conclusion has previously been emphasised by Coleman (1990) who observed that the more social credit is extended within the organisation, the greater the ability of employees to indirectly take advantage of other's knowledge, skills and other forms of human capital.

A review of the literature has shown that social capital has a proven relationship with economic development. This relationship has been investigated by a number of social scientists. In economics, North (1990) found that formal and informal institutions were indispensable for understanding economic performance. In sociology, Evans (1992, 1995) demonstrated that, whether a state was developmental or predatory, it was

crucially dependent on both the capacity of its public institutions and the nature of state-society relations (Fine & Lapavitsa, 2004).

The concept of social capital is rapidly becoming an important concern in business studies (Burt, Hogarth, & Michaud, 2000). Originally used as an aggregate concept that purports to explain why some communities are able to resolve societal problems through collective action (Putnam, 1993), social capital now appears more frequently in management and organisational research as a significant factor for the internal functioning of organisations (Tsai & Ghoshal, 1998). Thus, while social capital is not part of the production function, it has profound impact on the benefits that firms derive from their productive capabilities (Burt, 1992).

As said earlier, the traditional HRD was practised in the context of the individual, with practitioners focusing almost solely on the development of the specific skills, knowledge, and abilities of employees in order to ensure their effective performance in the organisation (Gilley & Gilley, 2003). This approach was built on the resource-based view of the firm which holds that differences in a firm's performance across time are driven primarily by unique resources and capabilities. Hence, research in conventional HRD tended to focus on defining the basic skills, knowledge, understanding, and other attributes that employees require to effectively perform their duties.

While not discarding the traditional view of HRD, recent studies have demonstrated the need to move beyond the limits of the neoclassical paradigms of HRD by incorporating social capital in human resource development research and practice (Korte, 2011; Krebs, 2008; Storberg & Gubbins, 2007; Brooks & Nafukho, 2006). The argument raised by these

scholars is that individuals live and work within groups, teams, networks, departments, or business units in the organisation, and, although much of the traditional theoretical work in HRD is focused on the individual as an agent in organisational settings (Storberg & Gubbins, 2007), changing the emphasis in HRD from an individual perspective to the social perspective embeds HRD more fully in professional work, capable of transforming the traditional workplace into conducive learning environment through social networks, partnerships, collaboration, interaction, and knowledge sharing (Krebs, 2008).

The new HRD perspective, which captures the core issues of efficiency and effectiveness in the utilisation of resources, follows the process of change or modification of human behaviour and processes through education, training and learning which are required to make a person think rationally, behave purposefully, and act skilfully. This is consistent with the complex and dynamic interactions among the environments, organisations, work process, the group or individuals operating at each point in time, as embodied in the systems theory (Swanson & Holton, 2001). The scope of contemporary HRD is much more than the accumulation of skill sets in the person (Wachira, 2010). As noted by Krebs (2008), in the 21st Century, competitive advantage derives from the ability to find, utilise, and combine the skills, knowledge and experiences of others in the organisation, and that:

It is no longer sufficient to manage individual assets....the HR professional of the 21st Century must manage inter-connected assets of the firm, and this requires focusing on between-employee factors; the connections that combine to create new processes, products and services (Krebs, 2008, p. 38).

The realisation that knowledge and skills are the key sources of competitive advantage places the HRD function in a situation of increased status and power (Gilley, Gilley, & Heather, 2009). However, to perform creditably in this new role, it is important to understand the interpersonal relationships that occur at the workplace and the impact such relationships have in the individual's response to the work environment (Hatala, 2006). As noted by Glaeser (2005), organic human bodies become recognised as people because of their interaction with other people. Hence, as the focus of HRD is on the thoughts and behaviours of employees, the foundations of HRD are, by definition, grounded in the social realm. The social is important in HRD practice because even though the human mind is the property of the individual, it is formed and conditioned through social interactions with others (Korte, 2011).

Notwithstanding the impact and importance of individual training and development which tend to improve the skills and knowledge base of employees for ensuring improved performance at both the individual and organisational levels, it is observed that the mere possession of a potentially valuable knowledge and other resources somewhere within the organisation does not necessarily mean that other parts of the organisation benefit from these resources. As noted by Hatala (2006):

If HR professionals are to deal with human capital issues, it is not enough to focus on the individualistic components of the organisation; they must also deal with the relationships that impact on the ability of individuals to function as a unit (p. 65).

Although HRD is still struggling to discover the most appropriate foundational theory, the literature appears to support the economic, psychological and systems theories proposed by Swanson and Holton (2001). The economic orientation, including the human capital, scarce resource and sustainable resource orientations require organisations to generate more income than they spend in order to exist. The psychological orientation, including the gestalt, behavioural and cognitive orientations, is based on the change process or modification of human behaviour and processes through education, training and other corrective measures which are required to make a person think rationally, behave purposefully and act skilfully. The systems orientation, including the general, chaotic and futuristic orientations, capture the complex and dynamic interactions among the environments, organisations, work process, the group or individuals operating at each point in time (Swanson & Holton, 2001).

While the psychological and systems orientations may have some impact on human resource development practice in some way, the economic orientation forms the main foundation upon which this study is built. The economic orientation is important for HRD practice because it provides an alternative way of implementing HRD interventions by demonstrating that the creation and sustenance of social capital in the organisation facilitate the flow of information, material, knowledge and other resources among employees, thereby guiding the HRD professional in formulating appropriate and cost-effective HRD interventions (Swanson & Holton, 2001; Coleman, 1990).

The integration of social capital into HRD practice in the sawmill industry has become necessary because the industry which directly provided

over 100, 000 employment opportunities and indirectly engaged over 2.5 million other Ghanaians, and as well, was once the fourth largest earner of foreign exchange after minerals, tourism, and cocoa in Ghana is virtually collapsing (Paulus, 2009).

This study has become necessary following the Decent Work Agenda in Africa (2007 – 2015) whose major goal is to create full and productive employment and decent work as a logical means to reduce poverty and inequality through decent policy-making at the international, regional and country level (ILO, 2007). According to the ILO (2007), the move is important because While the total number of people worldwide living on less than \$1 a day declined from 1.45 billion to 1.1 billion, between 1981 and 2001, mainly as a result of the rapid economic growth in China and other countries in Asia, the number in sub-Saharan Africa rather increased from 164 million to 314 million (). Thus, with the highest incidence of poverty in the World, Africa urgently needs to create more employment and tackle the scourge of hunger, malnutrition and overall low living standards. One way this can be done is to facilitate private sector investment to create more employment

Statement of the Problem

There is a decline in the performance of the Ghana sawmill industry which averagely contributed to an estimated value of US \$180 million, representing about 13 percent of the country's total export in the late 1980s (TIDD/FORIG, 2009). The industry is facing challenges, such as the use of outmoded machinery, illegal logging, global market competition, inadequate

concession and technical manpower (Paulus, 2009). Most processing mills are unable to meet technical and marketing challenges, and this has resulted in an almost total collapse of the industry. As at January 2014, there were only 35 registered sawmill firms in Ghana, an industry that could boast of about 700 firms in the late 1960s (TIDD/FORIG, 2009).

The decline in the performance of firms in the sawmill industry, according to Acheampong and Marfo (2011) has affected the employment situation and the exchange earning power of the country. The Ghana Forestry Commission (2009) has attributed the industry's low performance to lack of interaction and working relationships among members in the industry, arguing that the absence of this interaction and working relationship is the major factor that widens the gap between the few more successful sawmills and the small-scale firms that are poorly performing in Ghana.

Following these challenges, previous studies have investigated various aspects of the problem. In a study conducted among eight sawmill firms in Kumasi, for instance, Appiah-Kubi, Adom-Asamoah, Frimpong-Mensah and Tekpetey (2011) explored the capacity of sawmills and carpentry workshops with regard to their ability to process lesser used timber species for efficient utilisation. It was found that, though the sawmill firms had the needed cutting and processing machinery for commercially known species, they expressed difficulty in processing some lesser used timber species due to their extreme hardness and inadequate technical know-how.

In another study, Owusu, Appiah, Damnyag and Blay (2011) investigated the recovery efficiencies of some milling techniques in Ghana. On the basis of the number of species and trees felled, the conversion

efficiency ratios of four milling technologies were compared. They found that the Wood-Mizer milling technology had a higher efficiency than the freehand chainsaw and the improved chainsaw technologies. Surprisingly, they also found that most of the sawmill firms in Ghana were using outmoded and wasteful milling technologies and associated business practices.

Similarly, a review of the literature has shown that some studies have previously been conducted in the area of social capital in Ghana (Adjargo, 2012; Ofori & Sackey, 2010). A study by Adjargo (2012), which focussed on the possibility of using the social capital concept to enhance dissemination of agricultural extension technologies as well as sustaining rural development, found that “investment in networks and group development tends to enhance knowledge and skill acquisition, thereby accelerating economic returns to individuals and society” (Adjargo, 2012, p. 225). Again, Ofori and Sackey (2010) deployed the concept for determining organisational performance. They found that social capital was critical to knowledge sharing in organisations and markets in emerging economies like Ghana.

While many studies have been conducted to investigate the problem facing the industry, there is none that attempted to assess how the integration of social capital and HRD practice can contribute to resolve the problem in Ghana. Furthermore, most of the studies that investigated social capital and HRD practice in other countries were based on the desk review of existing literature. Thus, an empirical study of the relationship between social capital and HRD practice was necessary to provide another perspective of this relationship in the literature. Consequently, this study was conducted, following the assumption that the networks that constitute social capital are

capable of helping members to have access to knowledge, information, and other relevant resources required for an efficient and effective performance of their duties (Krebs, 2008).

Objectives of the Study

The general objective of the study was to examine the contribution of social capital to human resource development practice of firms in the sawmill industry in Ghana. Specifically, the study sought to:

- 1 Explore the HRD practices of firms in the sawmill industry in Ghana;
- 2 Assess the institutional arrangements of top management for promoting social capital into the HRD practice of firms in the sawmill industry;
- 3 Determine the contribution of social capital to HRD practice in relation to information flow, resource exchange and support among employees in the sawmill industry in Ghana; and
- 4 Recommend policy options and HRD practices for promoting and improving social capital in the sawmill industry in Ghana.

Research Questions

In the light of the stated objectives, the following research questions were addressed:

- 1 What HRD practices are carried out by firms in the sawmill industry in Ghana?

- 2 What institutional arrangements are put in place by top management to promote social capital in the sawmill industry?
- 3 What contribution does social capital make to knowledge sharing, information flow, resource exchange and support among employees of firms in the sawmill industry?

Scope of the Study

The current study seeks to address how social capital can be utilised to permit maximum return on human resource development practice in the sawmill industry in Ghana. Although various dimensions of social capital have been identified in the literature, introducing all dimensions is not feasible in this study. Thus, the study focused mainly on the network of social relationships that exist among employees and between firms in the sawmill industry in Ghana.

Like social capital, though the scope of human resource development is extensive, this study considered human resource development in terms of the three fundamental components, namely: training and development; organisational development; and career development. In each case, the focus was on how social capital maximises returns on investments made in human resource development in the sawmill industry in Ghana.

Finally, only employees in the sawmill industry in Ghana were eligible to answer questions relating to the study. Views expressed by all other persons were, however, noted and used where necessary.

Significance of the Study

The relevance of this study rests on its probable contribution to knowledge, policy making and human resource development practice. This study is the first comprehensive study of social capital and human resource development practice in the sawmill industry in Ghana. Thus, in terms of theoretical significance, the study advances knowledge and understanding of how the integration of social capital in HRD practice contributes to knowledge sharing, information flow, resource exchange and support among employees in Ghana. Consequently, universities and colleges in Ghana and other developing countries can apply the results for developing and redesigning programmes and courses in HRD practice.

In addition to the potential theoretical contributions, the study has significant practical implications. First, the results of the study may reveal the role and position of social capital in human resource development practice. In this way, the findings of the study are expected to benefit HRD professionals in formulating realistic and far-reaching policies for revamping the sawmill industry in Ghana. Again, the findings of this study might enrich the competencies that HR professionals require to identify, utilise, and combine the skills, knowledge and experiences of subordinates in the firm. The study may also provide employers with critical knowledge that helps them to assess the performance of their HRD professionals.

Finally, a sound model may ground future research and practice, and provide useful information for policy formulation and implementation. The findings of this study will, therefore, provide policy makers with current HRD models and directions for application in Ghana.

Organisation of the Thesis

The thesis is organised into nine chapters. Chapter One – The Introduction, illustrates the background and statement of the problem, the objectives of the study, and a set of research questions. It also includes the significance of the study and the organisation of the thesis.

Chapter Two – Conceptual and theoretical framework for human resource development practice – presents the concepts and theories underlying human resource development practice. The main topics include the definitions, components, major and related theories of HRD practice. The concepts of capacity and capacity building are also reviewed in this chapter.

Chapter Three – Conceptualising social capital and the network theory – traces the main dimensions of social capital that foster the exchange of knowledge and resources among employees. Also included in this chapter is the review of the works of the four main advocates of social capital. The chapter ends with the conceptualisation of the social network theory.

Chapter Four – Empirical evidence on social capital and human resource development practice – provides a review of the relevant empirical works on social capital and human resource development practice from which the conceptual framework of the study emerged. Major lessons learnt from the empirical review are also discussed in this chapter.

Chapter Five – Overview of the sawmill industry in Ghana – focuses on areas, such as the contribution of the industry to economic development of Ghana, government interventions in the industry, the regulatory framework of the industry, the Ghana Community Forest Committee, the Voluntary Partnership Agreement, and chainsaw milling in Ghana.

Chapter Six – The methodology – presents the methodological framework adopted for the study. It covers the research design, a description of the study area, characteristics of the target population, sampling procedures, data collection instruments, fieldwork, as well as data processing and analysis.

Chapter Seven – Human resource development practices of firms in the sawmill industry in Ghana – deals with the existing human resource development practices, such as training and development, performance management, career development, and performance appraisal.

Chapter Eight – Promoting the contribution of social capital to human resource development practices in the Ghanaian sawmill industry – presents the findings from data collected from HR professionals and line managers in the selected sawmill firms. Three main themes are covered in this chapter: institutional arrangements for promoting social capital in the sawmill industry; the challenges facing human resource development professionals as they attempt to integrate social capital in their programmes and practices; and the contribution of social capital to human resource development practice in the sawmill industry.

Chapter Nine – Summary, conclusions, and recommendations – draws together all aspects of this research in a concise manner. It also explores the possibility of extending this research in the future. At the end of the report are the bibliography and appendices.

CHAPTER TWO

CONCEPTUAL AND THEORETICAL FRAMEWORK FOR HUMAN RESOURCE DEVELOPMENT

Introduction

This chapter discusses the conceptual and theoretical assumptions underlying human resource development. The chapter is divided into three broad sections. The first section focuses on the definitions of human resource development, concept of capacity, capacity building, and effective employee capacity utilisation. The second section reviews the models and competencies in professional HRD practice, the six most common HRD practices and a distinction between HRD and HRM. The third section concentrates on the theoretical foundations of human resource development, ending with some lessons learnt from the review of the conceptual and theoretical literature.

Definitions of Human Resource Development

Human resource development has been defined in various ways, but attempts to define it has proved frustrating, confusing and elusive (Blake, 1995). As noted by McGoldrick, Stewart and Watson (2001), defining HRD has been frustrated by an apparent lack of boundaries and parameters. According to the authors, elusiveness is created through the lack of empirical evidence on several aspects of HRD, including the philosophy, purpose, and location. Consequently, several authors have refused to define HRD, arguing that the attempt to proffer definitions of the concept is to misrepresent it as a thing of being rather than a process of becoming (Lee, 2001).

Despite the overwhelming lack of consensus, the literature appears to support three broad definitions. The earliest definitions perceive the discipline as a process. The process definitions focused solely on the society. The first of these definitions was given by Harbison and Myers (1964) who defined HRD as the process of increasing the knowledge, the skills, and the capacities of all the people in a society. This definition was interpreted within three exclusive functional areas in society; the economic, political and socio-cultural. In economic terms, HRD was described as the accumulation of human capital and its effective investment in the development of an economy. In political terms, HRD prepares people for adult participation in the political process, particularly as citizens in a democracy. From the socio-cultural point of view, HRD helps people to lead fuller and richer lives, less bounded by tradition (Harbison & Myers, 1964).

Another process definition of HRD was provided by Horwitz, Bowmaker-Falconer and Searll (1996). They defined HRD as an area of study that is concerned with the processes by which citizens of a nation acquire the knowledge and skills necessary to perform both specific occupational tasks and other social, cultural, intellectual and political roles in society.

While the process definitions widened the scope of HRD as an area of study, they failed to consider the individual and organisational perspective of HRD. The definitions also failed to show that HRD consists of a series of activities. Consequently, another category of HRD definitions was expected.

The second category of definitions viewed HRD as both a process and/or an activity. The first of these definitions was provided by McGoldrick, Stewart and Watson (2001). They defined HRD as encompassing activities

and processes which are intended to have impact on organisational and individual learning. Their definition assumes that organisations can be constructively conscribed of as learning entities and that the learning processes of both organisations and individuals may be influenced through deliberate and planned interventions.

McLean and McLean (2001) also defined HRD as any process or activity that, either initially or over the long-run, has the potential to develop adult's work-based knowledge, productivities, expertise, and satisfaction, whether for personal or group/team gain, or for the benefit of an organisational community, nation or ultimately, the whole of humanity.

In addition to showing that HRD is both a process and/or an activity, the definitions given by McGoldrick, Stewart and Watson (2001) and McLean and McLean (2001) have further increased the HRD scope to include the individual, group and organisational. Their definitions also revealed that HRD is concerned with individual and organisational learning.

While the preceding definitions seem to have uncovered the key elements in HRD, recent scholars have criticised them for lacking credibility because they failed to view HRD as a function that consists of both processes and activities. One of these recent scholars is Vince (2003) who conceptualised the HRD function as one of discovering how an organisation has managed to become set in its ways, how to organise opportunities for change that can challenge a tendency to resist change, and how to imagine and deliver processes that underpin organisational development and transformation (Vince, 2003). Swanson (2008) functionally defined HRD as the process of

developing and/or unleashing expertise through organisational development and personnel training for the purpose of improving performance.

The analysis of both recent and earlier definitions has shown that, as a field of study, HRD typically focuses on three areas of professional practice, namely, learning, performance, and change in work-related systems (Harbison & Myers, 1964; McGoldrick, Stewart & Watson, 2001; Vince, 2003). In other words, HRD professionals have the strategic role of supporting organisational learning and ensuring that both individuals and the organisations profit from the learning and development practices offered by HR professionals. In this way, HR professionals perform functions that are intended to foster learning capacity at all levels of the organisation; to integrate learning culture into overall business strategy; and to promote the organisation's efforts to achieve high performance (Swanson, 2008).

Several criticisms have been made about the multiplicity of HRD definitions. McLean and McLean (2001) noted that most of the original definitions are predominantly of the US and Europe orientations, and that HRD definitions lack global and international perspectives. This, according to the authors, is as a result of the fact that many of the students with degree certificates in HRD were educated in the US. Consequently, they suggested the need to broaden the scope of HRD definitions to consider how the field is viewed in other countries, especially in Asia and continental Europe. McGoldrick, Stewart and Watson (2001) also noted that current definitions of HRD predominantly focus solely on the organisation to the exclusion of individuals and the society.

Despite the lack of a generally, acceptable definition of HRD, this study adopted the definition of McLagan, (1989, p. 7) who defined HRD as "the integrated use of training and development, organisation development and career development to improve individual, group and organisational effectiveness". Following this definition, HRD is defined in this study as including all the operations involved in ensuring the effective and beneficial utilisation of human resources at the individual, group and organisational level

Distinction between HRD and HRM

In most countries, there is hardly any clear-cut distinction between Human Resource Development (HRD) and Human Resource Management (HRM) (Konan, 2010; McLean & McLean, 2001). In fact, HRD is perceived as one of the many components of human resource management which is required to support the HR function in terms of employee training and development (Stavrou-Costea, 2005). Several HRD scholars have attested to this by indicating that the HRD function was traditionally subsumed within the HRM department where the individuals performing these functions often had very little or no background training in HRD (Haslinda, 2009; Rowold, 2008; McLagan, 1989; Guest, 1987).

While the literature appears to support the argument that HRD grew slowly as one wing of HRM, by embracing new thinking and focussing on activities and processes intended to improve the individual, societal and organisational learning, HRD has been repositioned from providing support services, to rather providing parallel services that distinct it from HRM (McGoldrick, Stewart & Watson, 2001). The different pathways followed by

HRD and HRM have their own set of plans and policies, as well as functionality support in the corporate strategy (Iles, & Yolles, 2003).

In an attempt to clear the confusion surrounding the two concepts, Haslinda (2009) asserted that HRM is the only label that represents and explains the management and development of human resources, from the point of view of recruitment to compensation, through to career management and development to the point of retirement from the organisation. It is often argued that all the four components of human resource development that were originally advocated by Guest (1987) were positioned under the function of human resource management, alongside with other HR functions (Saru, 2007).

The notion that HRD is a component of HRM was also supported by Blake (1995). According to Blake, HRD emerged from the concept of organisational development which is one of the functions of the human resource manager. He argued that the American Society for Training and Development (ASTD) approved the term “HRD” because of the strategic contribution of training and development which had by then expanded to include interpersonal skills, such as coaching, group process facilitation and problem solving. There is no empirical evidence that the society intended to make HRD a separate field of study (Blake, 1995).

The general understanding from the preceding review is that HRD is a field of activity aimed at maintaining and developing knowledge and skills in the work place. It is a collection of activities which take place in a certain organisational context in order to achieve certain aims, and it is performed by certain practitioners who are equipped with certain knowledge, tools and techniques. On the basis that the activities performed by HRD practitioners are

contained in the HRM department in most countries including Ghana, this study is based on the assumption that HRD is one of the major components of HRM. In addition to training and development, individual development and organisational development, HRM performs other functions such as performance and reward management, and industrial relations practice. Thus, this study, HRD does not stand on its own, it is only one of the many functions of the HRM professional.

Concept of Capacity

As a development concept, capacity has been defined by various authors in different contexts. In the context of the public sector, Sharma (2008) defined capacity as the abilities of government to plan, manage and sustain the development process of their economies and societies, and in keeping with aspirations and potential of their people. Lane and Wolf (1990) defined capacity in the context of public policy as the ability to govern which rests on the human resources of governmental agencies - the people who participate in and enable the process of governance.

The UNDP defined capacity as the ability of individuals and organisations to perform functions effectively, efficiently and sustainably. This definition provides two dimensions of capacity: capacity assessment; and capacity development. Capacity assessment is defined as the structured and analytical process by which the various dimensions of capacity are diagnosed (assessed) within a broader context, as well as being evaluated for specific entities and individuals within the system. Capacity development, on the other hand, is defined as the process by which individuals, groups, organisations,

institutions and societies increase their abilities to: (i) perform core functions, solve problems, define and achieve objectives; and (ii) understand and deal with their development needs in a broad context and in a sustainable manner (UNDP, 1997).

Capacity Building

The lack of capacity necessitates capacity building whose main focus is on the development of the knowledge, skills, and attitudes of individuals or group of individuals. Groot and Van Der Molen (2000, as cited in Williamson, Rajabifard & Enemark, 2003, p. 2) defined capacity building as “the development of knowledge, skills, and attitudes of individuals and groups of people relevant in the design, development, management and maintenance of institutional and operational infrastructures and processes which are locally meaningful”. Though the long-term goal of capacity building may be broader and more holistic, the short-term requirement is staff development through education and training.

Capacity and capacity building concepts are important because they can constrain or support performance and, therefore, influence issues of organisational credibility, efficiency and legitimacy. Again, building the capacity of individuals and teams as part of human resource development, and strengthening the systems and management of the organisations in which they operate are vital to and inherent in all sustainable development programmes (Antwi & Analoui, 2008).

Effective Employee Capacity Utilisation

The rapidly changing and competitive environment has now compelled most organisations to become more efficient in terms of cost and operations. While some of these organisations are either increasing their installed capacities or enhancing capacity utilisation, a good number of them are combining both strategies (Wittek & Agneessens, 2011). In each case, however, the general consensus is that, while installed capacity helps organisations to achieve economies of scale, enhanced capacity utilisation makes them more efficient in their daily operations (Styhre, 2010). Thus, the main purpose for enhancing capacity utilisation is to reduce the average cost per resource employed.

Capacity utilisation measures the extent to which a business is using its production potential. In case of human resources, this represents the effective deployment of existing skills, qualifications and competencies of employees for maximum achievement of individual and organisational goals and objectives (Wittek & Agneessens, 2011; Styhre, 2010). The optimum utilisation of available human resources is equally important if the whole objective of capacity building is to be achieved. The attempt to build human capital faces the challenge of inappropriate utilisation and, in many cases, the under-utilisation of human resources. And utilising human resources at less than capacity means that a company is operating at high cost per unit of human effort (Styhre, 2010).

Capacity utilisation is potentially a powerful driving force behind business cycles as it often leads to innovation, improved organisational performance, collective problem solving, organisational learning and

adaptability, and competitive advantage (Wen, 1998). Without effective human capacity utilisation, most development interventions cannot succeed. According to Wen (1998, p. 7) “by providing an additional margin from which the level of output can be adjusted, capacity utilisation greatly amplifies business cycle shocks”. A business must, therefore, aim at making the most productive use it can of its existing human resource capacity; and they must operate at full scale or as close to full capacity as possible. Average production costs falls as output rises, so higher human capacity utilisation can reduce unit cost, thereby making a business more competitive (Styhre, 2010).

Models, Components and Competencies in Professional HRD Practice

Over the last four decades, the American Society for Training and Development (ASTD) sponsored several HRD-related competency studies with the aim of determining the competencies needed for successful HRD practice, and defining the major areas in HRD practice (Konan, 2010). As noted by McLagan (1989), a defined set of competencies is the hallmark of a true profession, so understanding and applying Competency Models is essential for staying current in the HRD field. Thus, in each study, a model was provided that defined the set of knowledge and skills required for delivering the human resource development outputs (McLagan, 1989).

The ASTD Competency Models answer the question: what do HR professionals need to know and do to be successful on their jobs now and in the future? And, how do the practitioners prepare for that future which is constantly changing than ever? As noted by Abdullah, Musa and Ali:

The development of an HR professional Competency Model is an area of interests to practitioners, researchers, academicians, employers, and consultants in HRM today. The established ASTD Competency Model sets out the competency categories and their corresponding competency domains and factors. In this way, such models can guide the practitioner in his or her approach to HRD practice (2011 p. 241).

The first empirically sponsored study by the American Society for Training and Development (ASTD) was conducted by Pinto and Walker in 1978. In this study, Pinto and Walker (1978) examined the training and development roles and competencies of HR professionals. Having received 2,855 responses from the total of 3000 questionnaires administered to the ASTD members in the U.S., Canada, Mexico, and other countries, they identified and categorised 14 major training and development activities which were used to establish a model that contained the primary areas for training and development (Konan, 2010; Chen, Bian & Hom, 2005).

The second competency study, called the McLagan and McCullough's Model for Excellence, was sponsored by the American Society for Training and Development (ASTD) in 1983. McLagan and McCullough examined the detailed and updated meaning and definition of excellence in the field of training and development to serve as a yardstick for guiding business, government and non-profit making organisations (McLagan & McCullough, 1983). According to Konan (2010), the 1983 Model for Excellence represents the first modern attempt to define training and development.

Until 1989 when McLagan conducted her second study for the American Society for Training and Development (ASTD), training and development were the main focus of researchers and practitioners in the field of human resource development. The 1989 Model for HRD practice (McLagan, 1989; Watkins, 1989) saw the addition of organisation development and career development as other important components of human resource development. Consequently, McLagan, (1989, p. 7) defined HRD as "the integrated use of training and development, organisation development and career development to improve individual, group and organisational effectiveness".

McLagan's model was presented in a form of a Human Resource Wheel. The Human Resource Wheel has had, and continues to have, a profound impact on HRD practice. The 1989 Model for HRD Practice (McLagan, 1989), being an update of McLagan's 1983 Models for Excellence, broadened the scope of HRD by defining 11 roles of the HR professional, 74 outputs of the HRD work, 35 core competencies, and 13 ethical issues. The major evolution of the Models for HRD Practice, as compared to McLagan's 1983 Models for Excellence, was the expansion on role categories and the addition of new competencies of the HR professional (Dilworth, 2003).

Seven years after McLagan's 1989 Model for HRD practice was launched, the ASTD observed that training was no longer a sufficient intervention to solve human performance problems at the workplace. Another study, conducted by Rothwell, was, therefore, sponsored in 1996. Consequently, Rothwell (1996) established the Human Performance Improvement Model and defined human performance improvement:

As the systematic process of discovering and analysing important human performance gaps, planning for future improvement in human performance, designing and developing cost-effective and ethically-justifiable interventions to close the performance gaps, implementing the interventions, and evaluating the financial and non-financial results (p. 79).

The main purpose of Rothwell's 1996 study was to provide the foundation for future practice in human performance improvement (Tseng & McLean, 2008).

In 1999, a third competency study was carried out by Rothwell, Sanders and Soper (1999). The main purpose of the study was to provide the HRD professional with guidelines for identifying potential strategic competencies that would meet the constantly changing technology, globalisation and corporate transformations. These competencies, according to the authors, would assist the HR professional to shift attention towards analysing the root causes for gaps in productivity, and finding the best solutions that will close those gaps. Consequently, the study sought to: identify the competencies required for ensuring success in Workplace Learning and Performance (WLP), and identify those competencies that may be required to ensure success for WLP in the next five years (Rothwell, Sanders & Soper, 1999; Donavan & Marsick, 2000).

WLP was defined as the integrated use of learning and other interventions for the purpose of improving individual and organisational performance. The Human Performance Improvement Model was used as the basis for analysing performance, determining causes, selecting relevant

interventions, implementing interventions, managing change and evaluating employee performance (Teodorescu, 2006; Rothwell, Sanders & Soper, 1999).

Another landmark competency study was sponsored by the American Society for Training and Development in 2004. The research was conducted by Bernthal, Colteryaahn, Davis, Naughton, Rothwell, and Wellins (2004). The main purpose of the study was to find ways by which HRD professionals could be assisted in building and developing their careers at different positions within their organisations and across a wide spectrum of areas of expertise and roles. The 2004 ASTD competency model placed more emphasis on three key layers of HRD knowledge and skill areas: foundational competencies; areas of professional expertise; and the roles in the areas of responsibility.

The continuing applicability of the 2004 ASTD model was tested in 2007 when the board of directors sponsored a team of experts to use both quantitative and qualitative methods to collect data from professionals and thought leaders. Using the interview, a survey, and an in-depth literature review, the team found that many researchers have used the 2004 ASTD Competency Model to study the roles and competencies of HRD professionals in countries, such as China, Egypt, Korea and Taiwan (Chen, 2008; Yang, 1994; Peerapornvitoon, 1999; Watkins, 1989). Again, it was discovered that the competencies and areas of professional expertise were highly used and remained in use throughout the world (Salopek, 2008). Even though the general consensus was that the 2004 ASTD model had been consistently used by many, another study was conducted in 2013.

The American Society for Training and Development (ASTD) launched the latest competency model in May, 2013. The main purpose of the

Human Resource Development Practices

In an attempt to build a strong theoretical framework and to gain a deeper contextual understanding of the results of this study, it was considered important to review the most relevant HRD practices that promote efficient and effective use of resources in the firm. The professional expertise of HRD professionals cannot be examined without paying attention to major areas of HRD practice, such as, recruitment and selection, employee attraction and retention, training and development, performance and potential appraisal, reward systems and practices and health and safety practices. These practices are reviewed in the next section.

Recruitment and Selection Practices

Within the process of leading, managing and developing people, recruitment and selection are inevitable. To this end, HRD professionals take a crucial “gatekeeper” role by recruiting and selecting only those people who can be led, managed and developed (Misnan & Mohammed, 2007). Effective recruitment and selection decisions enhance the firm’s chances of finding the best candidates available for any advertised position (Bartunek & Moch, 1987). Recruiting and selecting candidates in an effective and efficient manner can both avoid undesirable costs – for example those associated with high staff turnover, poor performance and dissatisfied customers – and engender a mutually beneficial employment relationship characterised, wherever possible, by high commitment on both sides (Misnan & Mohammed, 2007).

Talents may be recruited internally through various methods, such as promotions from within, lateral transfers, job rotation and rehiring former

employees (Fuller & Huber, 1998, as cited in Taylor, 2010). Internal recruitment practices allow the organisation to experience cost savings in areas such as advertising, induction and training (Taylor, 2010). For instance, employers can advertise job vacancies at no cost by using staff notice-boards, newsletters or the intranet systems (Bartunek & Moch, 1987). A company may sometimes resort to external recruitment. Not all skills can be sourced from within, making it difficult for HRD professionals to ignore external recruitment methods, such as the formal techniques of printed media advertisements, external agencies, education liaison, other media and professional contacts (Misnan & Mohammed, 2007).

Once management has decided on the appropriate means by which they will recruit potential candidates for the job, their next task is to identify the most appropriate and effective method for identifying the person who will best fit the vacancy (Taylor, 2010). Selecting the right candidate is fundamental to the functioning of an organisation; inappropriate selection decisions reduce organisational effectiveness, invalid reward and development strategies, and can be distressing for managers who have to deal with unsuitable employees. As noted by Krebs (2008), in today's increasingly competitive business environment, hiring the best people is considered one of the most critical elements of a company's success. In supporting this stance, Misnan and Mohammed (2007) submitted that the placement of human resources, more than anything else, should be seen as a matching process, and how well an employee is matched to a job affects the amount and performance of that employee in a given task.

Employers are now recognising that well designed and implemented selection programmes produce concrete benefits, including a reduction in turnover, enhanced performance, lower levels of employee misconduct, as well as other tangible indices of return on investment (Taylor, 2010). Taylor also observed that one of the most popular combinations of selection tools used by these employers over the last few decades is the classic trio of C.V's/application forms, interviews and references. The logic of employee selection is that, without variability among individuals in terms of their abilities, aptitudes, interests and personality traits, one would expect all job candidates to perform comparably (Taylor, 2010).

Employee Attraction and Retention Practices

Attracting and retaining quality talents are central to the construction and manufacturing industries where turnover rates average over 45 percent (Misnan & Mohammed, 2007). As noted by Delery and Shaw (2001), because of skill shortage, employee turnover, long work hours and the often remote location of the construction and manufacturing industries, it is imperative for HR professionals to constantly review the effectiveness of the firms' talent attraction and retention strategies and to assess if they align with the demands and aspirations of the individuals to whom those strategies were formulated.

Workplace challenges and the remoteness of the location of an organisation may have significant influence on its attractiveness to potential employees (Bartunek & Moch, 1987). It has also been found that HRD practices, such as work design, incentives, flexibility, training and direction setting positively influence an employee's perceptions of the attractiveness of

an organisation (Misnan & Mohammed, 2007). As the war for talents continues in many industries, potential talents now prefer to work in an organisation that offers better conditions of service and guarantees more security, better careers, development opportunities, and better salaries (Nicoleta, 2011). They will also want to work in an organisation known by its brand (Kotler & Pfoertsch, 2010).

Retaining quality employees is also critical to the growth and survival of the firm; it costs significantly more to replace and train a new employee than to retain an existing one (Misnan & Mohammed, 2007). An effective retention strategy rests on a combination of factors. Employees want their personal (e.g. compensation, benefits, scheduling etc) and practical (e.g. development, resources, tools, technology etc) needs to be met (Nicoleta, 2011). They also want to feel valued by the organisation. These imperatives must, therefore, become the foundation of the value proposition for employees, as evidenced by the organisation's vision, and strategies (Arneson, Rothwell & Naughton, 2013)

Training and Development Practices

HR professionals are expected to provide training programs in order to develop specific knowledge or expertise of employees (Jacobs, 2003). Present day businesses require more and more knowledge and skills that are still inadequately present in the formal school education (Vemic, 2007). Training and development are becoming a practical and vital necessity; they assist employees to develop and rise within the organisation, and increase their market value, earning power and job security (Mamoria, 1995). According to

Mamoria, a well-trained employee would make a better and economic use of materials and equipment, which tends to minimize wastages in the system (Mamoria, 1995). Training and development opportunities represent an employer's commitment to his workforce. So, poor training programmes tend to make employees feel a lower commitment to the employer. This can lead to lower job satisfaction and higher employee turnover.

There are two major types of training: on-the-job training and off-the-job training (Ongori & Ozonzo, 2011). On-the-job training (OJT) allows the trainee to acquire skills by actually doing the job (Dessler, 2005). It is a method of training where the learner develops skills in the real work situation by actually using the machinery and the materials involved in performing the job (Ongori & Ozonzo, 2011). This type of training is normally handled by experienced colleagues, supervisors, managers, and mentors who are usually mandated to provide training programs for developing the specific knowledge or expertise of employees (Obisi, 2011). Most frequently, there are three incentives for embarking on this type of training: the favourable relationship between training costs and benefits; the responsibility to train just-in-time; and the expectation of a positive transfer of what was learned to the employees' work situation (Sims, 2006).

Employees may also be deputed for outside training to enhance, update, or develop their specific skills. This may be necessary if the outside training can provide expertise, equipment, or sharing of experiences that are not available within the organisation (Jacobs, 2003). Off-the-job training programmes may be developed and conducted by in-house trainers or consultants hired for the task (Sims, 2006). Training instructions may be

delivered through lecture, vestibule training, role playing, case study, discussion and simulation, and the environment can be designed or controlled to minimize intermittent distractions from employers, thereby creating a climate conducive for learners (Gambin, Hasluck & Hogarth, 2010; Obisi, 2011). A major disadvantage of off-the-job training is that training effectiveness is constrained because of the possibility of inadequate transfer of learning from training environment to workplace environment.

One major challenge of the employer today is the inability to design training programmes to promote transfer of training. Most training programmes are inefficiently designed. As noted by Mohrenweiser and Zwick (2009), practically all training programmes are built on theoretical perspectives which tend to hamper the transfer of material learnt in a more practical fashion. In contemporary business, the focus of training has shifted from the trainer to the trainee (Knowles, 1990). The emphasis now is on learners doing something (in the learning process) other than listening and watching the trainer (Knowles, 1990). The role of the trainer has become one of designing activities and experiences to provide trainees with the opportunity to transfer the competencies they have learnt (Lerman, 2013; Mohrenweiser & Zwick, 2009; Phillips, 1996).

Performance and Potential Appraisal Practices

In the 21st Century, employees represent the heart and pulse of the organisation (Ahmad & Bujang, 2013). They are the ultimate assets whose performance determines the growth and productivity of the organisation (Katerina, Andrea & Gabriela, 2013). For this purpose, it is important that

employee performance is periodically evaluated using the 360 appraisal method (Ahmad & Bujang, 2013). Employee performance may be measured at the individual, group, or organisational level according to quantity or quality of output, creativity, flexibility, dependability, or anything else desired by management (Campbell, 1990). An organisation can derive total benefit from the performance of her employees only when management is able to explore, expand, and appraise the full potential of their employees (Fletcher, 2001).

The term performance appraisal has many labels, including, but not limited to, performance review, employee appraisal, performance evaluation, employee evaluation, employee rating, merit evaluation, performance assessment, performance measurement, staff assessment, or personnel rating (Ahmad & Bujang, 2013). In an effective performance appraisal system, the performance of individuals over the review period is evaluated; strengths and weaknesses identified, and reasons for any shortfall in performance examined (Bartunek & Moch, 1987). Performance appraisal may be conducted through job ranking, paired comparison, graphic rating scales, forced choice list, forced distribution, field review, rating by self and the peer group, or the 360° performance appraisal method (Ahmad & Bujang, 2013).

Performance appraisal focuses on identifying the employee's likely future roles within the organisation. In contemporary business, management would have to continuously review its structure and systems, create new roles, and assign new responsibilities (Katerina, Andrea & Gabriela, 2013; Fletcher, 2001). In this way, the capability of employees to perform the new roles and responsibilities would have to be assessed (Ahmad & Bujang, 2013). Performance appraisal has become part of a more strategic approach to

integrating HRD activities and business policies through which managers evaluate, compare and provide feedback on employee performance (Fletcher, 2001). Performance appraisal is important because it serves as the basis for performance feedback, employee training and development, validation of selection process, promotions and transfers, HR planning, layoff, and career development (Bartunek & Moch, 1987).

Reward Systems and Practices

The design of employee compensation is a delicate and more controversial area in human resource management (Ryan & Sagas, 2009; Chelladurai, 2006; Selden & Moynihan, 2000). Many employees consider pay as having a direct bearing on their status and recognition. They believe that their basic pay reflects how much they fare in the eye of management, and in the society in which they are working (Bohlander, Snell, & Sherman, 2001). Consequently, a high level of pay or benefit relative to that paid by competitors can ensure that a company attracts and retains high-quality employees. However, employees will feel satisfied with their pay if what they are receiving equates to the time, energy, and effort they contribute, with relation to what other workers receive. If they feel that their contributions exceed the rewards from the organisation and job, especially in pay, dissatisfaction may occur and, vice versa (Ryan & Sagas, 2009).

The design of employee compensation is a strategic issue which, according to Olive and Alan (1996), requires one to understand the basic purposes of compensation, knowledge of the determinants of compensation, and the use of pay surveys. By implication, decisions relating to employee

compensation should not be made randomly; for even where the value of jobs in the organisation are carefully determined, there is the possibility that one person may be paid more or less for the same job than his or her colleague in terms of qualification, seniority, experience and the like (Milkovich, Gerhart & Hannon, 1991). According to Anthony, Perrewe and Kacmar (2002), this is the overarching reason why pay level decisions are very crucial in designing an equitable employee compensation system (Schuler & Rogovsky, 1998).

The pay level of an organisation is simply the average amount of money that is paid for the specific groups of jobs in that organisation. The significance of having a well-calculated pay level is that it influences the ability of an organisation to attract and retain talented employees (Mello, 2002). Basically, three pay level policy options may be chosen: lead, lag or match policies. Firms with a lead policy pay higher wages than the average paid in the labor market. Employers who choose a lag policy pay lower than the average wage, while employers with a match policy tend to “match” the market rate (De Cieri & Kramar, 2008; Anthony, Kacmar & Perrewe, 2002).

Health and Safety Practices

A major challenge facing most industries today has been the prevalence of accidents resulting in injuries, diseases and loss of property and lives (Misnan & Mohammed, 2007). While industries, such as the mining, manufacturing, construction and lumber, are known to be very dangerous, risky and hazardous, the majority of accidents that occur on site are preventable (Thai & Grewal, 2007). According to Thai and Grewal (2007), the amount of regulations within such industries is indicative of this danger, with

many occupational health and safety standards often called up in law to provide the information necessary for curbing the situation (Hopkins, 2011). However, although there are numerous legislations governing industrial health and safety in different countries, the ultimate responsibility rests on management to create a self-disciplined workforce beyond legislative and regulatory requirements.

Traditionally, workplace accidents were attributed to engineering aspect of safety. Consequently, increased efforts on engineering safety through technological improvement were the hallmark of the day (Vredenburg, 2002). While research was on-going in this area of safety, it was observed shortly after the Chernobyl nuclear accident in the then Soviet Union that the beliefs and attitudes of employees working within the organization greatly affect the safety in the workplace. As noted by an early pioneer of accident prevention and industrial safety, Heinrich Herbert, 88 percent of industrial accidents originate from the human aspect of the organisation (Goetsch, 2005).

Following the preceding argument, the last four decades saw empirical research redirected to investigating the behavioural causes of technological failures (Thai & Grewal, 2007). This led to a greater focus on the human and organisational elements that contribute to unsafe operation of technological systems, such as poor usage and handling of engineering tools.

Theoretical Framework for Human Resource Development

In applied disciplines, rooted in professional practice, such as HRD, the quest to bring disciplinary coherence into its practice will depend on a strong theory development (Turnbull, 2002). Theory explains what a

phenomenon is and how it works (Torraco, 2005), thereby offering the platform for professionals to apply theory to real world situations. Without a strong theoretical framework, there is bound to be randomness and incoherence in the practice of HRD, and this can lead to a fundamental break between HRD research and HRD practice (Swanson, 2008).

A sound HRD theory unveils the most important parameters and how they are measured (Van, 1989). Theory has a practical utility; it is so practical because it advances knowledge, guides research and enlightens the profession in which it is applied. The challenge, however, is to identify the most appropriate theories that underpin the discipline (Swanson, 2008).

While there are contradictions surrounding the theoretical foundations of HRD, there appears to be a strong consensus on the three core orientations identified by Swanson and Holton (2001), namely: the economic orientation; the psychological orientation; and the systems orientation. The three HRD orientations have visually been presented in the form of a three-legged stool, each leg representing a key perspective of HRD. The integration of the three legs provides greater stability for HRD as a discipline and as a field of practice that is required to function in the midst of the constantly changing conditions.

The economic perspective is built on the survival and primary drive of organisations, namely, that organisations must generate more income than they spend in order to exist (Wachira, 2010). The economic perspective captures the core issues of efficiency and effectiveness in the utilisation of resources to meet productive goals in a competitive environment. It is constructed upon two important features of economics (Storberg, 2009; Salopek, 2008). First, productive resources are scarce to the extent that no

person, group, organisation or society has more than enough to produce or consume the goods and services they want. There is no sufficient amount of productive resources held by anyone, and this imposes a variety of constraints on both the choices available to a society, and the opportunities open to its citizens (Torraco, 2005; Watkins & Marsick, 1995).

The second feature is concerned with how choices are made. According to this view, the HRD professional will incur expenditure only when that expenditure is expected to contribute to the viability and profitability of the organisation (Storberg, 2009). By implication, the HRD professional must make a choice between alternative HRD practices and interventions in order to ensure an efficient and effective use of resources. As postulated by Swanson (2008), this will involve an examination of the activities and behaviours of decision-makers, such as consumers, producers, suppliers and governments, in order to understand how resources are allocated (Swanson, 2008). Again, the HRD professional must monitor and assess different aspects of the external environment that either poses threat or provides potential opportunity to the organisation and its members.

The economic perspective has three important orientations: the scarce resource orientation; the sustainable resource orientation; and the human capital orientation (McGoldrick, Stewart, & Watson, 2001; Lee, 2001). In the scarce resource orientation, the economic HRD perspective holds that there is insufficiency or limitations to everything, and that the flow of funds, equipment, land, raw materials, time, and talented workers that are required to produce the goods and services we want are limited in terms of the demand for them (Parts, 2003). Consequently, producers are required to make choices as

to how best to utilise resources in order to achieve the greatest return on investment. On this basis, the HRD professional is required to justify the use of scarce human resources each time the need arises (Lee, 2001).

The sustainable resource orientation holds that sustainable advantage will depend on new process technologies and less on natural resource endowments as new industries in the future will depend on brain power (Storberg, 2009). In its literal rudiments, sustainability means the capacity to maintain some entity, outcome or process over time (Lee, 2001). The implication of sustainable resource orientation is that HR professionals have a strategic role in ensuring competitive advantage for the firm by adding value to the existing organisational workforce (Salopek, 2008). To do this, the HRD professional must embark on comprehensive human resource development programmes to ensure that the organisation obtains the most talented, smart and sophisticated business people who are technologically literate, globally astute, and operationally agile (Thurow, 1993).

The economic HRD perspective has also drawn from the human capital orientation. In this orientation, the economic HRD perspective holds that expenditures on human resource development are investments in capital with valuable returns that can be employed in innovative ways (Gubbins & Garavan, 2009). The investment is not simply costs that must be reduced, it is an asset that must be developed and maintained. This implies that the HR professional's role is not to cut down cost on human resource development, but to add value to existing workforce whose cost must provide viability and profitability to the organisation (Haslinda, 2009).

The theoretical foundation of human resource development is also built on the behaviours and mental processes of people in organisations (Clark, 1989; Passmore, 1997). This is the psychological HRD perspective. Human resource development, from the psychological perspective, is the process of change or modification of human behaviour and processes through education, training and other corrective measures which are required to make a person think rationally, behave purposefully, and act skilfully (Lee, 2001). The psychological theory is important to the HRD professional because theories of learning, human motivation, employee relations, information processing, conflict resolution, and leadership, which require aspects of psychology, are viewed as useful derivatives of HRD (Swanson & Holton, 2001).

The psychological HRD perspective has three orientations: the Gestalt; Behavioural; and Cognitive orientations (Swanson & Holton, 2001). The Gestalt orientation holds that people do not see isolated stimuli, but stimuli gathered in meaningful configurations. In other words, it is necessary to perceive the whole of something rather than its constituent elements, as the whole has a meaning apart from the sum of its constituents (Gubbins, & Garavan, 2009). The implication of the Gestalt perspective is that, in order to understand the behaviours and mental processes of organisational members, HR professional must focus on the total workforce, rather than the individual employees in the organisation (Lee, 2001; Swanson & Holton, 2001).

The behavioural orientation is based on the belief that behaviours can be measured, developed and changed through specific learning processes (Salopek, 2008). In other words, all behaviours can be acquired and can, therefore, be changed through various forms of interaction with the external

environment. Knowledge of the behavioural perspective is important to the HR professional because it forms the basis of a learning organisation (Swanson & Holton, 2001).

The final orientation of the psychological HRD perspective is the cognitive psychology which holds that human beings organise their lives around purposes. In other words, they would always indulge in goal-directed behaviours (Salopek, 2008). Cognitive psychology requires the HRD professional to have knowledge about how employees acquire and apply knowledge or information.

The last of the three core orientations underlying HRD, as advocated by Swanson and Holton (2001), is the systems orientation. When applied to HRD, the systems orientation captures the complex and dynamic interactions among the environments, organisations, work process, the group or individuals operating at each point in time, and over time (Swanson & Holton, 2001). HRD has been described as a sub-system of the entire organisational system, and, like all other sub-systems, has the potential of influencing, harmonising, supporting or shaping the larger organisational or environmental systems which, in turn, can influence HRD practice (Iles & Yolles, 2003).

The systems HRD perspective has three orientations: the General systems orientations; Chaos orientations; and the Futures orientations (Brookes & Nafukho, 2006). The core thesis of the general systems orientations is that every system is characterised by the interactions of its components, as well as the nonlinearity of those interactions. Human resource development makes extensive use of the general systems perspective; rather than concentrating only on the internal forces within the organisation, HRD

professionals also tend to view organisations as open systems that interact with the external environment.

The chaos orientation is built on the assumption that organisations are complex systems which have the potential to behave chaotically. Moreover, a seemingly insignificant occurrence could trigger a sequence of events that can result in unpredictably large chaos situation (Kauffman, 1995). The implication of the chaos orientations of the systems HRD perspective is that the HR professional must be prepared to help the system to retain its purpose and effectiveness by working closely with employees and management in order to maintain peace in the organisation (Donavan & Marsick, 2000).

The futures orientation seeks to prepare a person to recognise and cope with an evolving future state (Kauffman, 1995). The HRD professional who recognises the importance of the futures perspective would employ tools of alternative futures and scenario building in order to create a true picture of the facts in the rapidly changing future environment, and this would help him or her to identify the various fluxes in those facts. In this way, the HR professional can make effective decisions which can translate into sustainable employee performance in the uncertain future environments (Korte, 2011).

Related Theories of Human Resource Development

In addition to the three major theories underlying HRD, the literature appears to support two related theories as being integral in providing the theoretical underpinnings of the HRD field. They include: the intellectual capital theory; and the resource-based theory. Edvinsson and Sullivan (1996) defined intellectual capital as knowledge that can be converted into value. In

other words, intellectual capital enables the knowledge firm to transform the innovations produced by its human resources into intellectual assets to which the firm can assert rights of ownership (Edvinsson & Sullivan, 1996).

Many companies now rely on intellectual assets for generating revenues, reducing labour cost, and creating whole new types of businesses (Swanson, 2008). According to Senge (1990), because HRD strives to enhance individual's capacity to learn, help groups to overcome barriers to learning, and create organisational culture that fosters learning, the HR professional is a change manager who must be positioned as a leader for acquiring, developing, and maintaining intellectual resources (Edvinsson & Sullivan, 1996).

The resource-based theory, on the other hand, holds that the organisation's resources and capabilities, rather than environmental conditions, form the basis for organisational decisions, performance, and competitive advantage (Mello, 2002). The implication of the resource-based theory is that a firm can achieve sustainable competitive advantage by acquiring and controlling valuable, rare, inimitable and non-substitutable resources and capabilities (Barney, 2001).

Lessons Learnt from Review of Conceptual and Theoretical Literature

Establishing a common theory that defines the scope and boundaries of HRD has been very controversial. Some HRD scholars do not believe that having an HRD theory or clearly specifying the underlying theory of HRD is essential to the profession (McLagan, 1989). They argue that ambiguity is desirable in preventing a field from becoming stagnant. However, other HRD

theorists think that a discipline must have well-established boundaries (Torraco, 2005).

While the theoretical foundation is considered important, there is, however, little agreement on a particular theory that underpins the field as an area of professional study and practice (Harrison, & Kessels, 2004; Haslinda, 2009). Presently, there are no universally accepted theories of HRD; there are some theoretical perspectives and orientations including the economic, systems, psychological perspectives. There are also related theories, such as the intellectual capital and the resource-based theories (Dilworth, 2003; Chen, 2008). However, as noted by Fenwick (2005, p. 225), “HRD practice is still not-grounded in research-based theories; it is based on guess-work and outmoded thinking”.

Despite the preceding challenges, however, the discipline has observed some appreciation from various authors and countries all over the world. As noted by Torraco (2005, p. 34), “theoretical research in HRD has established itself and is now at a point where many avenues exist for further contributions to the field”. According to him, the economic, psychological, and systems orientations, and their integration, more than any others, make up the theoretical basis of the HRD discipline. The three theoretical orientations are believed to address and clarify the boundary definitions, purpose, and assumptions of HRD, while their integrative state has been central in securing HRD as a reliable field of practice and research (Haslinda, 2009).

CHAPTER THREE

CONCEPT OF SOCIAL CAPITAL AND SOCIAL NETWORK THEORIES

Introduction

This chapter discusses the fundamental assumptions underlying social capital and social networks theories. The chapter is divided into eight sections. The first section conceptualises social capital as a resource rooted in social relationships. The second section presents some definitions of social capital, while the third section traces the origins of social capital following the contributions of Becker (1964), Bourdieu (1986), Coleman (1988) and Putnam (1993). Section Four presents the three key dimensions of social capital as postulated by Nahapiet and Ghoshal (1998). Section Five discusses the main criticisms of social capital, while Section Six reviews the relationship between social capital and demographic characteristics of people. The proximal indicators for measuring social capital are considered in Section Seven. The final section presents some theories of social networks as advocated by Katz, Lazer, Arrow and Noshir (2004).

Concept of Social Capital

Social capital has created conceptual confusion among many authors in the last few decades. The concept has been used in connection with a series of social phenomena, including human capital (Nahapiet & Ghoshal, 1998; Coleman, 1988), economic performance (Sabatini, 2008; Schuller, 2007), knowledge networks (Webb, 2008; Yuan, Gay & Hembrooke, 2006), entrepreneurship (Stam & Elfringe, 2008; Siqueira, 2007) and democracy

(Fukuyama, 1995; Putnam, 1993). It has also been conceptualised and operationally defined at many different levels of analysis, including individuals (Burt, 1992), organisations (Nahapiet & Ghoshal, 1998), communities (Putnam, 1993; Putnam, Leonardi, & Nanetti, 1993), and nations (Fukuyama, 1995). Yet another group of scholars took a multiple approach, combining group and organisation level analysis of social capital (Oh, Chung & Labianca, 2004).

Though much consensus has been reached about the meaning of social capital, divergent views and perspectives have also been raised about the concept (Lin, 1999; Yuan, & Gay, 2006). While Putnam's focus was on the benefits of social capital to a group, Coleman and Bourdieu believed that social capital exists between individuals, and must, therefore, be studied at the individual level (Coleman, 1988). Following these contradictions, the concept has been used differently by a host of theorists, including sociologists, political scientists, and economists, making it susceptible to multiple interpretations and theoretical traditions (Portes, 1998; Wiesinger, 2007).

Attempts to conceptualise social capital have resulted in many authors identifying different forms of the concept. The most common forms of social capital include the bridging, bonding and linking (Mignone, 2009; Kritsotakis & Gamarnikow, 2004; Woolcock & Narayan, 2000; Putnam, 1993). Bridging social capital relates to the social ties that cut across differences, such as race, class or ethnicity (Woolcock & Narayan, 2000; Putnam, 1993). It is the form of social capital that brings people together across diverse social divisions, and is essentially a horizontal notion, implying connections between societies, communities or groups (Mignone, 2009). "Bridging" social capital is outward-

looking and inclusive; it occurs when individuals from different backgrounds make connections through social networking (Putnam, 2000).

In contrast, “bonding” social capital refers to the relationships we have with people who are like us (Woolcock & Narayan, 2000). According to Mignone (2009), the potential benefits of social capital derive from social bonds; yet, individuals with bonding social capital have little diversity in their backgrounds but have stronger personal connections. As a result, Putnam (2000) described bonding social capital as being inward-looking and exclusive as it occurs when strongly-tied individuals, such as family and close friends, provide emotional or substantive support for one another (Putnam, 2000).

The links we have with people or groups further up or lower down the social ladder define the third and final form of social capital called the “linking” social capital (Putnam, 2000). Linking social capital is concerned with relations between people who are not on an equal footing (Macke & Kunrath, 2010). Woolcock and Narayan (2000) described linking social capital as the relationship between people of unequal power. According to the authors, linking social capital enables individuals and community groups to leverage resources, ideas and information from formal institutions beyond the immediate community radius.

Defining Social Capital

Though scholars continue to define social capital in varied ways, a review of literature has disclosed five categories of definitions: (i) definitions relating to social capital as a resource; (ii) definitions relating to the functions of social capital; (iii) definitions relating to the features of social capital; (iv)

definitions concerning the relation between actors in a social network; and (v) definitions relating to the ability of actors to secure benefits or work together in social relations. Although the presence of numerous definitions may provide ample understanding of the concept, it is also possible that these differing definitions may be a source of the misunderstanding among learners.

The first group of definitions proposed that social capital is a resource that is derived from social relations. Among these are the definitions of Bourdieu (1986), and Bourdieu and Wacquant (1992). Bourdieu (1986) defined social capital as the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition. A similar but much refined definition was given by Bourdieu and Wacquant (1992). They defined social capital as “the sum of resources, actual or virtual, that accrues to an individual or a group by virtue of possessing a durable network of more or less institutionalised relationships of mutual acquaintance and recognition” (Bourdieu & Wacquant, 1992, p. 119).

The fundamental premise of the first definitions is that social capital relations exist only on the basis of material and/or symbolic exchange which serve as a common security for members in the social relations (Bourdieu, 1986). While the first group of definitions saw social capital as a resource, they failed to indicate the function of this resource or the features of social capital as a resource. Several authors have, therefore, not recognised these definitions and their empirical applications in the last few decades (Coleman, 1988). According to these authors, social capital is created by rational, purposeful individuals who build social capital to maximize their individual

opportunities. As a result, social capital, defined as a resource, limits its role to just one function; allowing members to rely on the reciprocity of exchange and enforceable trust to access the social capital resource (Coleman, 1990).

Following the preceding criticisms, another group of definitions proposed social capital as a function or input that facilitates the actions of individuals in a social structure. They include the definitions of Coleman (1990) and Schiff (1992). Coleman (1990) defined social capital by its function; "it is not a single entity, but a variety of different entities, having two characteristics in common: they all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure (Coleman, 1990, p. 302). Schiff (1992, p. 160), on his part, defined social capital as the set of elements of the social structure that affects relations among people, and which often, are inputs or arguments of the production and/or utility function.

The second set of definitions, however, failed to view social capital as a resource that is derived from social relations. They only indicated the functions of social capital without making an attempt to explain what it was. As a result, the third strand of definitions moved the attention of authors to specific characteristics of social relationships, such as trust, norms and networks. The authors, building on the second set of definitions, considered a more general measure of social capital and social inclusion across a whole society. One of these authors is Putnam. According to Putnam (2000), social capital refers to the features of social groups, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated action. Putnam's definition has been criticized as being circular and

tautological, thereby viewing social capital as a property of communities and nations rather than individuals (Portes, 1998).

Based on the preceding criticisms, the fourth group of authors defined social capital in terms of the relationship between individuals in the networks in which they are embedded. Three of these are: Morgan (2000), Woolcock (2001) and Castle (2002). Morgan (2000) defined social capital:

As the naturally occurring social relationships among individuals which promote or assist the acquisition of skills and traits valued in the marketplace...an asset which may be as significant as financial bequests in accounting for the maintenance of inequality in our society (p. 100).

Woolcock, 2001, p. 154), on his part, defined the concept “as the web of social relationships that influences individual behavior, thereby affecting economic growth”. Castle (2002, p. 99) also defined social capital “as the web of corporative relationships between individuals that facilitates the resolution of collective action problems”.

The difficulties surrounding social capital definition is not surprising. The concept emerged in an interdisciplinary space, allowing for a remarkable range of social phenomena, from educational performance (Coleman, 1988), economic prosperity (Woolcock, 2001; Putnam, 1993), democracy (Putnam, 1993) to even health and happiness (Rose, 2000). While there are differences among the definitions, a common understanding, however, is that social capital is a relational resource that resides in social relationships, comprising social networks, social norms, values, trust and resources (Lin, 1999; Putnam, 2000). Regardless of this conclusion, it is believed by many scholars (e.g.

Woolcock, 2001; Portes, 1998) that, if social capital is to be put on a firm footing or used as a precise means of social analysis, it is necessary that the concept is given a generally accepted definition (Li, Pickles & Savage, 2005).

The Origins of Social Capital

The term social capital was first identified by Tonnies (1887) and Kropotkin (1902) in the 20th Century (as cited in Lin, 1999). The concept, however, disappeared until 1916 when Hanifan (1916) used it to explain the role of community participation in shaping local educational outcomes. The first explicit usage of social capital in the contemporary sense has been attributed to Jacobs (1961) and Bourdieu (1986), but the concept was later given a novel theoretical framework by Coleman (1988). The major impetus to scholarship on social capital, however, came with Putnam's seminal works on governance in Italy, and his subsequent argument that Americans were "bowling alone" in the late 21st Century (Pretty, 2003). Together, these scholars have moved the idea into academic debates (Halpern, 2009).

Social capital, at an extremely early stage, evolved out of the writings of economists and, to a large extent, taking economics as its starting point. One of the early economic writers on social capital is Becker (1962). Not only has Becker constructed a full account of social capital in terms of its attachment to externalities, networks, norms, interactions and even social forces but he also went through some progression from physical and natural capital to human capital, from human to personal capital and from personal capital to social capital.

Becker argued that social capital, as a residual fabric, tides up what is otherwise inexplicable in other type of capital. His intention, therefore, was to incorporate traditional economic variables into human behaviour, thereby complementing the perfect market with what he described as the social milieu. According to the author, certain empirically observable behaviours in the perfect market cannot be reduced to mainstream economy calculations. Consequently, there was an urgent need to expand the mainstream economy in order to tackle new and emerging social problems. As noted by Fine (2001), the social aspect of human life cannot be taken away from society; if the economic approach is to deliver the analytical goods fully, then the social must be brought back (Fine, 2001).

By the end of the 1970s, social capital, as a concept, was introduced into the social theory by a French sociologist, Pierre Bourdieu (1986). Bourdieu focused on institutionalised networks, such as the family, class or political party to explain his notion of social capital. According to him, the network of relationships within such groups is a potential resource from which individual group members can profit socially and economically (Bourdieu, 1986). With reference to the family, Bourdieu maintained that a network of family relations is a typical springboard through which unofficial circulation of capitals occurs. In his opinion, therefore, because resources in general are available to all, capital may readily be identifiable with social economic groups or even with each and every individual in that group.

According to Bourdieu, the amount of social capital available to an individual is dependent upon “the size of the network of connections he can effectively mobilise and on the volume of the capital possessed in his own

right by each of those to whom he is connected” (Bourdieu, 1986, p. 248 - 249). Consequently, the theoretical and interpretative underpinnings of Bourdieu’s social capital focussed on the extent of social connections or networks of social relationships among actors (Bourdieu, 1986).

A holistic application of Bourdieu’s concept of social capital may not be possible in this study. His argument was that social capital as a resource was meant to benefit only the actors in social interactions. He did not elaborate on the benefits that may accrue to groups, the community or organisation. While this study focuses on benefits to individuals and the group as a whole, Bourdieu’s teachings seem to have little relevance in this study. Notwithstanding, his argument that social capital is a potential resource that provides both social and economic benefit is most useful in this study.

Coleman (1988, 1990) is one of the inspirational founders of social capital. By comparing Catholic and Non-Catholic schools in the United States, Coleman found that individuals from “better” (Catholic) families or neighbourhoods did better at school than those in other circumstances. For Coleman (1988, 1990), social capital is a structural resource that is inherent to a society and operates as capital for the individual (Fine, 2001).

Drawing from his studies, Coleman criticised the neoclassical theories of economics that view the actor (person or a firm) as separate individuals dealing not with other actors but with a market. According to him, such theorists are inclined towards constructing a theory of social structures and strategies on the basis of methodological individualism, and, as a result, tend to reduce social analysis to economic calculations (Coleman, 1988). In his opinion, the social cannot be derived from the individual; it is a public good

that can shape the actions of individual members in a group, and can influence their collective interest and action (Coleman, 1988).

By indicating that social capital is a public good that can shape the actions of members in a group, and can influence their collective interest and action, the work of Coleman on social capital has a significant bearing on the current study. Additionally, his argument that social capital can be used as a tool for explaining differential school performance is applicable to the issues involved in this study.

In the early 1980s, a new round of literature emerged on the concept of social capital. Putnam's launching of the 'benchmark', its popularity, and prominence, clearly changed the face of social capital. Following his works on social capital, he has been described as the creator and main exponent of social capital theory (Fine, 2001). His first use of the concept was inspired by Coleman's study of social capital and school performance. Having followed Coleman's use of social capital for differential school performance in the U.S., Putnam shifted the focus on education to politics, by looking at why the north of Italy's record of development proved superior to the case in south Italy.

The decline of U.S social capital was the main focus of Putnam's "bowling alone" thesis. In this study, Putnam demonstrated how American civic life was declining, thereby undermining the active civic engagement which a strong democracy requires from its citizens (Fine, 2001). He believed that, over the last three decades of the 20th Century, there has been a reduction in all the forms of "in-person social intercourse" upon which Americans used to fend, educate and enrich the fabric of their social life. According Putnam, Americans now spend substantially less time in social and participative

activities, unlike some 160 years ago when Alexis de Tocqueville visited America (Fine, 2001). Putnam deploys two factors to mark the decline of US social capital: the insufficient role of the state in revitalizing America's stock of social capital; and the rise of the television.

With regard to the insufficient role of the state in revitalizing America's stock of social capital, Putnam maintained that the state failed to relate bowling clubs to effective public policy. The term "bowling club" was used as a metaphor for the more general ways in which US citizens participate in civil society and spin off externalities to one another. Putnam, however, did not intend to consider social capital as a replacement for public policy. For Putnam (1993, as cited in Fine, 2001, p. 89): "Social capital is a prerequisite for public policy and, in part, a consequent of it. Social capital works through and within states and markets, not in place of them".

On the issue of the television, Putnam maintained that the technological "individualising" of America's leisure time through television, the internet, and eventually virtual reality helmets were the major cause of the fast eroding social capital in America (Putnam, 1993). For these two reasons, Putnam described Americans as "bowling alone", which means that the American society is one in which members are civically disengaged.

From the two studies, Putnam established that social capital has both individual and collective benefits. His argument was that, just as physical capital (tools) and human capital (education and training) can increase productivity, so can social contacts affect the productivity of individuals and groups. In buttressing his stand, Putnam argued that a "well-connected individual in a poorly connected society is not as productive as a well-

connected individual in a well-connected society. Even the poorly connected individual may derive some of the spill-over benefits from living in a well-connected community (Putnam, 2000).

The summary review shows that social capital theorists draw on a range of perspectives to explain the concept, identify its purpose, demonstrate how it works and connect it to different social and political values and positions. While the studies of Coleman and Putnam, with their focus on values and networks, form the basis of the “mainstream” social capital theory, Bourdieu’s work allows for the subtle use of the concept to analyse the relations between social capital and social class, and the significance of the social and material context in which resources are generated. The review has also shown that Becker’s singular contribution has been to broaden the reach of mainstream economics into spheres it previously ignored.

Key Dimensions of Social Capital

Nahapiet and Ghoshal (1998) have characterised social capital in terms of three interrelated dimensions: the structural, cognitive and relational (Tsai & Ghoshal, 1998). Drawing from previous literature on the formulation of value creation, as arising from a combination and exchange of resources, Nahapiet and Ghoshal (1998) theoretically justified how attributes of each of these dimensions facilitates the exchange of resources within firms. According to the authors, social capital encompasses many aspects of a social context, such as social ties, trusting relationships and the value systems that facilitate actions of individuals within that context (Nahapiet & Ghoshal, 1998). In distinguishing between the three dimensions, the authors observed that the

characteristics that failed to disable the classifications tend to facilitate the construct's comprehension.

The structural dimension of social capital is defined as the social interactions, including the patterns and strength of ties that exist among members of a social group (Pearson, Carr & Shaw, 2008). It is the overall pattern of connections that enable individuals to identify others with potential resources that they may not have at their disposal (Tsai & Ghoshal, 1998). The structural dimension is concerned with access to other actors, individuals, and groups. In this dimension, the location of the actor in the structure of interactions provides certain advantages, such as getting jobs, obtaining information or accessing specific resources (Tsai & Ghoshal, 1998). Networks and memberships form one major aspect of the structural dimension of social capital. Networks describe the standards of connections, through variables, such as density, connectivity, network configuration, stability and ties (Rhee, 2004; Moynihan & Pandey, 2007).

The cognitive dimension of social capital is embodied in attributes, such as shared code or narratives that facilitate a common understanding of collective goals and proper ways of acting in a social system. It includes shared norms, values, attitudes and beliefs that predispose people towards mutually beneficial collective action (Krishna & Norman, 2002). The cognitive dimension of social capital actually captures the essence of what Coleman described as the "public good" aspect of social capital (Coleman, 1990). The cognitive dimension comprises the group's shared vision and purpose, as well as its unique language, and deeply embedded cultures (Macke & Kunrath, 2010). In the context of the organisation (especially a large,

complex organisation), the shared vision and/or the set of common values held by organisational members help develop this dimension of social capital, which, in turn, facilitates individual and group actions that can benefit the whole organisation (Tsai & Ghoshal, 1998).

The relational dimension of social capital comprises the resources or assets that are developed through repeated interactions within the network of social relationships (Tsai & Ghoshal, 1998). They include trust, norms, expectations, obligations and identity (Nahapiet & Ghoshal, 1998). The relational dimension focuses on that aspect of social capital which influences the behaviours of actors in a social relationship (Granovetter, 1973). One important manifestation of the relational dimension of social capital is social trust. Since trust can induce joint effort, a trustworthy actor is likely to get other actor's support for achieving goals that would not be possible in a situation where trust did not exist (Tsai & Ghoshal, 1998).

Some scholars have indicated that the structural dimension is an antecedent of both the cognitive and relational dimensions as it establishes the interactions between actors that are essential for developing either the cognitive or relational associations (Pearson, Carr & Shaw, 2008; Tsai & Ghoshal, 1998). According to these authors, individuals often acquire shared experiences and relationships over time before developing common vision and purpose. They also develop relationships of trust before formulating norms and identity (Tsai & Ghoshal, 1998). It is also agreed that the cognitive dimension is an antecedent of the relational dimension of social capital. This, according to Arregle, Hitt, Sermon and Very (2007), depends on the view that

shared goals and narratives often lead to shared norms and obligations, and enhances feelings of trust and identity (Arregle, Hitt, Sermon & Very, 2007).

Criticisms of Social Capital

While social capital has gained popularity and is increasingly being viewed as integral to organisational success, the concept has strongly been criticised because of the huge range of issues on which it is based (Lowndes, 2004). Most of the empirical studies that support social capital were conducted from household and community level, “drawing on sophisticated measures of community networks, the nature and extent of civic participation, and exchanges among neighbors” (Woolcock & Narayan, 2000 p. 1). According to Chaskin, George, Skyles and Guiltinan (2006), the fundamental premise of these studies is that the well-connected are more likely to be hired, housed, healthy, and happy. In the context of the organisation, the well-connected are more likely to be promoted faster, receive higher salaries, be favorably evaluated by peers, miss fewer days of work, live longer, and are more efficient in completing assigned tasks.

Social capital, however, has both costs and benefits. In other words, social capital is an asset and a liability as well. For instance, some parents or guardians fear that their children or wards may fall into wrong networks, that peer pressure and a strong desire for acceptance will induce them to take up harmful habits (Haythornthwaite, 2005). It is also argued that social ties in the form of personal connections can be used to unfairly discriminate, distort, and corrupt (Pearson, Carr & Shaw, 2008). One other criticism leveled against social capital is based on the assumption that it is a public good. According to

Halpern (2009), social networks in the form of organised crimes or gangs do not constitute a societal good as submitted by Putnam (1993). Portes (1998) listed the negative side of social capital as the exclusion of outsiders, restriction on individual freedom and a downward leveling of norms.

The term capital, as in the phrase social capital, has also been a point of contention among various authors. As noted by Bowles and Gintis (2002), “the attributes said to make up social capital - such as trust, commitment to others, adhering to social norms and punishing those who violate them - describe relationships among individuals, rather than a thing possessed by those individuals (Bowles & Gintis, 2002). Fischer (2005) described social capital as a concept based on a misleading metaphor. According to him, the term “capital” implies three elements: extension in time; an intended sacrifice for deferred benefit; and alienability. He argued that while the concept might describe important relationships, the term itself and the way it is conceptualised in the literature do not guarantee any of the three elements. Consequently, in the opinion of Son and Lin (2008), the supporting concepts of social capital, such as “bridging” and “bonding” fit better than the phrase social capital.

Another aspect of social capital that opened the door for critics is the assumption that social capital unambiguously reduces transaction costs related to uncertainty, rather than acknowledging its power to promote inequality or to restrict individual’s advancement as a result of their membership obligation within groups (Chaskin, George, Skyles & Gultinan, 2006). In spite of its positive characteristics and diverse applications, the presence of class distinction and power relations has compelled many researchers to describe it

in perverse terms, such as anti-social, perversive and public bad (Adhikari & Goldey, 2009; Portes, 1998; Putnam, 2000). Social capital has also been criticised by Mansuri and Rao (2004) as lacking sensitivity to political, social, cultural, and the plights of the poor particularly in the developing world.

Much as social capital may be criticised, the concept has strategically been used by many scholars, non-governmental organisations, international institutions, such as the World Bank, and the Organisation for Economic Co-operation and Development (OECD), to investigate social, political, economic and cultural phenomena (Grootaert & Bastelaer, 2001).

Social Capital and Demographic Characteristics of People

The concept of social capital is usually understood at a group level than the individual level. Yet, the measurement of the concept typically involves individual-level based questions that are often aggregated to represent the group (Parts, 2009). This brings to the fore, the issue of social capital and how it is related to specific socio-economic and demographic characteristics of individual actors in social groups. While there are many socio-economic and demographic characteristics, four of the most important, namely, age, gender, level of education, and length of time spent in the group, are reviewed in the following section.

It is well-established that older individuals are more likely to achieve higher levels of social capital in a group. As noted by Adeyeye (1991), the older the participant in any group, the higher their level of participation in group activities. Affirming the submission of Adeyeye (1991), Akapbio (2008 p. 64) explained that “the older individual is expected to be more focused in

his/her desires and would not affiliate for mere fun". The grown-up individual tends to ensure that the purpose of affiliation is achieved through increased participation in group activities. Kapucu (2011), however, found that young adults comprise the most social capital out of all the age groups. In confirming this stand, he explained that the younger generation are in the process of change and meeting new people constantly, while the older age groups live a more steady and routine life, which explains the differences in social capital.

Another important socio-economic and demographic characteristic is the gender of actors in the social group. Although there have been inconsistent outcomes in studies, a relatively large number of studies have found that, compared to men, women have fewer weak ties in their networks, which may be more beneficial for their businesses than strong ties (Loscocco, Monnat, Moore & Lauber, 2009; Klyver & Terjesen, 2007). With respect to network activities, however, Cromie (1992) found that male entrepreneurs put more efforts into both social and professional clubs and societies, and that women spend less time developing new contacts and have less frequent contacts with their network members than do men. The degree of access to bonding and linking social capital has also been found to be higher among men as compared to women (Loscocco, Monnat, Moore & Lauber, 2009). While there is inconsistency of outcomes from linking social capital to gender, Cromie (1992) found that women's networks are largely similar to men's networks in terms of size, density, and activities.

Education is one of the most important determinants of social capital (Glaeser & Goddard, 2003; Alesina & Ferrara, 2000; Putnam, 1993). As noted by Putnam (2000), educated people are more likely to have higher trust in

other people and they tend to join more social groups and participate in social engagements more frequently. According to Glaeser and Goddard (2003), education spreads knowledge - the basic component of human capital, and cultivates social norms - the core of social capital. It also promotes social cohesion and strengthens citizenship behaviour (Offe & Fuchs, 2002).

It has also been established that one's social capital can be affected not only by one's own education, but also by that of others around him. As a result, the literature distinguishes between relative effect and an absolute effect. The relative effect indicates that education is a proxy for relative status, and a sorting mechanism for people with higher ability to acquire social capital. The absolute effect refers to the accumulation of civic values and knowledge (Nie, Junn & Stehlik-Barry, 1996).

One possible determinant of social capital is the length of time an actor has spent in the social group. Cote and Healey (2001) observed that the length of time people have lived in an area or organisation is a particularly important factor in terms of the strength and breadth of people's social networks. According to the authors, the longer a person has lived in an area, the deeper roots they have in that community and the more likely they are to be civically engaged, belong to local organisations, look out for and help neighbours, and enjoy living in their local area (Cote & Healey, 2001). Additionally, the length of time spent in a social group, otherwise called residential stability, enables cohesive relationships between members and encourages shared values, norms, and trust. Again, as noted by Haythornthwaite and Kendall (2010), because social capital is dependent on the relationships between individuals, residential stability is a necessary precondition for high rates of social activity.

Tools for Measuring Social Capital

The measurement of social capital arises from roles, networks and other social relationships that facilitate cooperative behavior among persons, or from norms, values and other cognitive commitments that predispose people to work together for mutual benefits (Krishna & Norman, 2002). Measuring social capital is a notoriously difficult exercise, partly because of the coexistence of multiple definitions of what constitutes social capital, and partly because it necessarily rests on elusive and intangible proxies rather than hard facts (Granovetter, 1973). What makes it more difficult to measure social capital is the lack of comparable proxies extending throughout space and time (Haythornthwaite, 2005).

While there are several ways of measuring social capital, the bulk of social capital research has used the network of tie strength (strong ties or weak ties) as grouping variables for measuring social capital (Grosser, Kidwell-Lopez & Labianca, 2010; Roch, Scholz & McGraw, 2000). A weak social tie exists between actors who are not closely connected, such as casual acquaintances or co-workers who do not interact regularly, while strong ties exist between close friends who communicate most frequently (Candance & Hamilton, 2010).

While strong ties actually confine actors to their immediate social environment, weak ties enable them to reach beyond their small, well-defined social circles in order to have contacts with other sections of the network (Granovetter, 1973). Strong ties offer emotional support and intimacy but they do not allow for exchange of novel information that is usually accessible to members in weak tie relationships. Granovetter (1974) has further noted that

weak ties can invariably play a significant role in diffusing complex pathways of information which tend to provide an opportunity for mobility within a given social network. The notion of tie-strength (weak or strong) being a quantifiable property that characterises members in the social network stems from a thorough and specific testing of the social network theory which has helped researchers to obtain information about the network itself and the individual actors as well.

There are three theoretically-driven approaches to the analysis of networks (Borgatti, Mehra, Brass & Labianca, 2009). They include: the Social Network Analysis (SNA); Transaction Cost Analysis (TCA); and Actor Network Analysis (ANA). Although the evolution of each type of network approach has varied, all three categories share a common empirical focus on relational structures. They also employ a similar set of mathematical analysis (Gupte & Eliassi-Rad, 2012). However, while the Transaction-Cost Analysis offers an explicit justification of networks being different from markets or hierarchies, both the Actor Network Analysis and Social Network Analysis tend to view networks as analytical tools that may be used for explaining and justifying markets and hierarchies as variations in network structures (Dempwolf & Lyles, 2012; Son & Lin, 2008).

By providing a range of descriptors (indicators and predictors) which are capable of characterizing the network as a whole, as well as the properties of the individuals in the network, the theories of social network frequently provide a quantitative framework for characterising social structure at the level of the individual, the organisation or the entire society (Krause, Croft, & James, 2007).

Theories of Social Networks

There are a number of theories which have been proposed or adopted to describe and advance the various patterns or interactions among actors in particular situations (Wasserman & Faust, 1994). In spite of the numerous theories, the general consensus is that the attributes of actors (individuals, groups, organisations or communities) are less important than the relationships between actors in the network (s) to which they belong (Katz, Lazer, Arrow & Noshir, 2004). Five theories of social networks have often been identified in the literature. They include: the self-interest theory; social exchange or dependency theory; mutual or collective interest theory; social cognitive theory; and the homophily theory (Katz, Lazer, Arrow & Noshir, 2004; Wasserman & Faust, 1994).

The self-interest theory postulates that people make rational choices in order to acquire personal benefits. In other words, people form social ties in order to maximize their personal preferences and desires or minimize their losses (Katz, Lazer, Arrow & Noshir, 2004). The self-interest theory has been criticized on grounds that it can be equated with selfishness. However, acting on self-interest, according Katz, Lazer, Arrow and Noshir (2004, p. 34) does not necessarily prevent one from serving others; “while each actor is trying to maximize his or her individual interest, each is at the same time constrained because he or she is embedded in an interdependent relationship with others”.

The social exchange or dependency theory holds that social interaction is an exchange activity, tangible or intangible, particularly of rewards and costs (Homans, 1961). It treats the exchange of benefits as the most fundamental premise or open secret of human behavior (Homans, 1961) and

so it is a phenomenon permeating all social life (Coleman, 1990). According to this theory, actors in the social network are governed by reciprocal relations, and that individuals establish and continue social relations on the basis of the expectation that such relations will be mutually advantageous. Thus, a person may not continue in the long-run if he perceives that reciprocity will be violated by other members (Zafirovski, 2005).

The collective interest theory is built on the premise that people form social ties in order to maximize the collective ability of actors for leveraging resources and mobilizing collective action in their environment (Katz, Lazer, Arrow & Noshir, 2004). In this way, the theory seeks to explain that mutual interest and the possibility of benefits arising from a coordinated action often outweigh the individual action and self-interest of members. According to advocates of this theory, the outcome of pooling efforts together is larger than the sum of what is achievable at the individual level. In other words, the whole is bigger than the sum of its constituent parts (Bateman & Snell, 1999).

A family of social cognitive theories has also been employed in explaining the theoretical foundations of social networks. The social cognitive theory seeks to explain how individuals in a society acquire and maintain specific behavioural patterns while providing for intervening strategies (Bandura, 1997). The theory, when applied to the network perspective, posits that network ties facilitate flows of knowledge within a group, thereby reducing the need for each group member to possess skills or expertise available elsewhere in the group (Zafirovski, 2005).

The fifth construct that is often employed in explaining the theoretical foundation of the social network perspective is the homophily theory. The

theory holds that when people share much in common, in terms of similar backgrounds or preferences, the desire to interact with each other is greatest because interpreting communication between them is easier (Aguenza & Mat-Som, 2012). The similarity-attraction hypothesis of this theory captures the idea that:

at workplaces, managers tend to hire subordinates from the same college; at school and college, people tend to make friends or date with people with similar social backgrounds; and in politics, politicians and bureaucrats promote their college party members to higher positions (Katz, Lazer, Arrow & Noshir, 2004, p. 45).

Despite the popularity of the homophily theory, however, its main drawback is that of determining the criteria used to evaluate similarity.

At the worksite, all the five theories underpinning social networks have far-reaching implications for the success or otherwise of business organisations. Some employees form social networks for the sake of their own personal interest, and will simply break away from groups when they observe that their self-interests and expectations may not be met. Such employees often do not form permanent associations as they tend to avoid collective actions and mutual dependence (Aguenza & Mat-Som, 2012).

Similarly, employees who believe in the social exchange perspective tend to involve in collective action only when they feel that such relations will be mutually beneficial. Where this fails, they tend not to be good actors in social relations. Another set of employees may join social relations only when they think other members have similar backgrounds and preferences. They

will fail to join collective action where they think other members have dissimilar preferences (Aguenza & Mat-Som, 2012; Todeva & Knoke, 2005; Van, 1989).



CHAPTER FOUR

EMPIRICAL STUDIES ON SOCIAL CAPITAL AND HUMAN RESOURCE DEVELOPMENT

Introduction

This chapter reviews the literature on empirical investigation of social capital and HRD practice. A growing number of sociologists, political scientists, economists, and organisational theorists have evoked: social capital in human resource development practice: social capital for the creation of human capital (Coleman, 1988; Storberg, 2002); social capital as a foundation for HRD practice and interventions (Kessel & Poell, 2004; Alexopoulos & Monks, 2004); the applicability of social capital to HRD practice (Storberg & Gubblins, 2007; Brooks & Nafukho, 2006; Hatala, 2006); and social capital as a key to organisational success (Korte, 2011; Krebs, 2008).

The rationale for reviewing the empirical literature is to gain more insight into the application of the main variables in the study. It is also expected that the review will facilitate the researcher's choice of methods or instruments. Another expectation is that the review will help the researcher to refine the problem statement, which, in turn, may necessitate some changes in the objectives. The chapter ends with a discussion on the conceptual framework for social capital and human resource development practice.

Social Capital for the Creation of Human Capital

Coleman (1988) is one of the first social scientists to discover that social capital creates local economic prosperity. Examining the effect of social capital within the family and in the community outside the family, Coleman

(1988) demonstrated that communities differ in terms of the presence or absence of links among parents in each community. According to Coleman, in a community where there are links, parents can discuss activities of their children and come to fruitful conclusions with respect to standards and sanctions. In this regard, each parent constitutes a monitor, not only for his own child, but also for other children, and this helps a family or the community in raising their children, which, to him, is a way of creating human capital for the community.

After studying the dropout rates among school children in 893 public schools, 84 catholic schools, and 27 private schools, Coleman found that dropout rates were high among school children in communities with less links than those with high links. He, therefore, concluded that social capital in both the family and community aids in the formation of human capital. In explicating the social capital concept, Coleman identified three forms: obligations and expectations (which depends on trustworthiness of the social environment), information flow capability of the social structure, and norms accompanied by sanctions.

A similar but more recent study on social capital and human resource development was conducted by Storberg (2002). The purpose of the study was threefold: to review the historical evolution of the concept of social capital and the development of capital theories; to present Lin's (1999) theory of social capital as one component of neo-capital theory; and to determine some possible research and practice implications of social capital theory for the field of human resource development (Storberg, 2002).

Drawing on the review of the empirical literature, Storberg (2002) teased out the contribution of social capital to HRD practice, arguing that:

if human resource development practitioners had knowledge of the components of social capital (structure, network, and collective action) as well as the propositions of the theory, then the HRD practitioner could offer business leaders a wealth of new information regarding employee, supplier, and customer networks (Storberg, 2002, pp. 496).

In other words, social capital offers human resource development scholars and practitioners a new way of organising and conceptualising the connections between social relationships and individual and organisational performance (Storberg, 2002). On the basis of these arguments, Storberg concluded that HR professionals, by creating the conditions for flourishing social capital, can help business organisations to realise the full potential of their most valuable assets - the employees in the organisation.

The basic difference between Coleman's study and Storberg's (2002) study lies in the unit of analysis. While Coleman investigated the contribution of social capital to human resource development in the family or community, Storberg focused on the business organisation. According to Coleman, the level of inter-personal trust, feelings of responsibility, and the quality and efficacy of civic engagement occupy the centre stage in local economic and human capital development. While Coleman's (1988) focus is on the community with the parent being the focal point in ensuring human capital development, Storberg (2002) focused on the HR professional as an integral contact in helping organisations to develop their crop of human resources.

The recognition that social capital is central to economic and human capital development (Storberg, 2002; Coleman, 1988) provided the inspiration for Kessels and Poell (2004) to investigate the implication of andragogy and social capital for human resource development in a knowledge economy.

Social Capital as a Foundation for HRD Practices and Interventions

Following an empirical review of existing literature, Kessels and Poell (2004) submitted a proposition that social capital forms a foundational ground for human resource development in contemporary knowledge economies. In a study that purported to investigate the implications of andragogy and social capital for human resource development, the authors found that the traditional economic factors, such as monetary capital, physical labour and raw materials, were becoming less important as compared to the capability of adding value through knowledge development, improvement, and innovation. Consequently, they proposed that the performance of firms and institutions in a knowledge economy can only be judged on the basis of their knowledge productivity which requires an integrated set of elements, such as andragogy and social capital.

In justifying this stand, they explained that “social capital, in the context of the organisation helps to transform the traditional workplace into a conducive learning environment through social networks, partnerships, collaboration, interaction and knowledge sharing (Kessels & Poell, 2004). This notion was based on a chain of logical reasoning: “in a knowledge economy, growth is based on improvement and innovation of work processes, products, and services, and this depends on knowledge productivity which

requires personal involvement and individual learning in a favourable social context” (Kessels & Poell, 2004, p. 1).

Much like Storberg (2002), Kessels and Poell (2004) focused on the organisation. Following a desk review of the literature, they concluded that the performance of firms and institutions in the 21st Century greatly depends on the capability of people rather than those traditional factors, such as monetary capital, physical labour, and raw materials. In trying to buttress this conclusion, the authors submitted that social capital theory offers an interesting perspective on how learning is integrated into the social context of the work environment.

The contribution of social capital to HRD practice has also been investigated by Alexopoulos and Monks (2004). In a study that sought to contribute theoretically to the debate on the emergent role of HRD practices in intra-organisational knowledge sharing within knowledge-intensive environments, the authors proposed an alternative model of the interrelationships between HRD practices and social capital dynamics in the Knowledge-Intensive Firm (KIF).

Drawing on both the theoretical and empirical literature, the authors argued that the emergence of the KIF and the contribution it makes to the knowledge economy signals the need for a shift from those conventionally rigid organisational structures to a more fluid structures whose boundaries can no longer be defined in terms of land or capital ownership criteria, but rather in terms of the transferability of useful organisational knowledge.

Focusing on the organisation, Alexopoulos and Monks (2004) argued that the mere possession of potentially valuable knowledge somewhere in the

organisation does not necessarily mean that other parts of the organisation benefit from this knowledge. In their opinion, the intervening role of HRD professionals is to facilitate the integration and regeneration of otherwise fragmented and asymmetrically distributed knowledge of the organisation. In this regard, social capital becomes crucial as it facilitates the interaction among members, thereby allowing individuals to share useful knowledge. The authors, therefore, proposed the inclusion of social capital as a fundamental factor into the HR equation. They cautioned, however, that the employees' ability to share knowledge is both the cause and the outcome of the cognitive, relational, and structural dimensions of social capital embedded in the organisational structure (See Figure 1).

The model suggests that HRD practices should aim at contributing to the simultaneous development of human and social capital, which, in turn, translates into the firm's intellectual capital advantage. Following this model, the authors concluded that the advantage of incorporating social capital into HRD practice is achievable if HRD professionals adopt four interdependent and mutually reinforced roles. The four interdependent roles include human capital steward (assisting individuals to develop their knowledge, skills and capabilities); knowledge facilitator (coaching, resource gathering, and providing constructive feedback to employees); relationship builder (helping individuals' to build a strong web of relationships); and rapid deployment specialist (drawing on both human and social capital to contribute to the firm's intellectual capital advancement (Andrews, 2009).

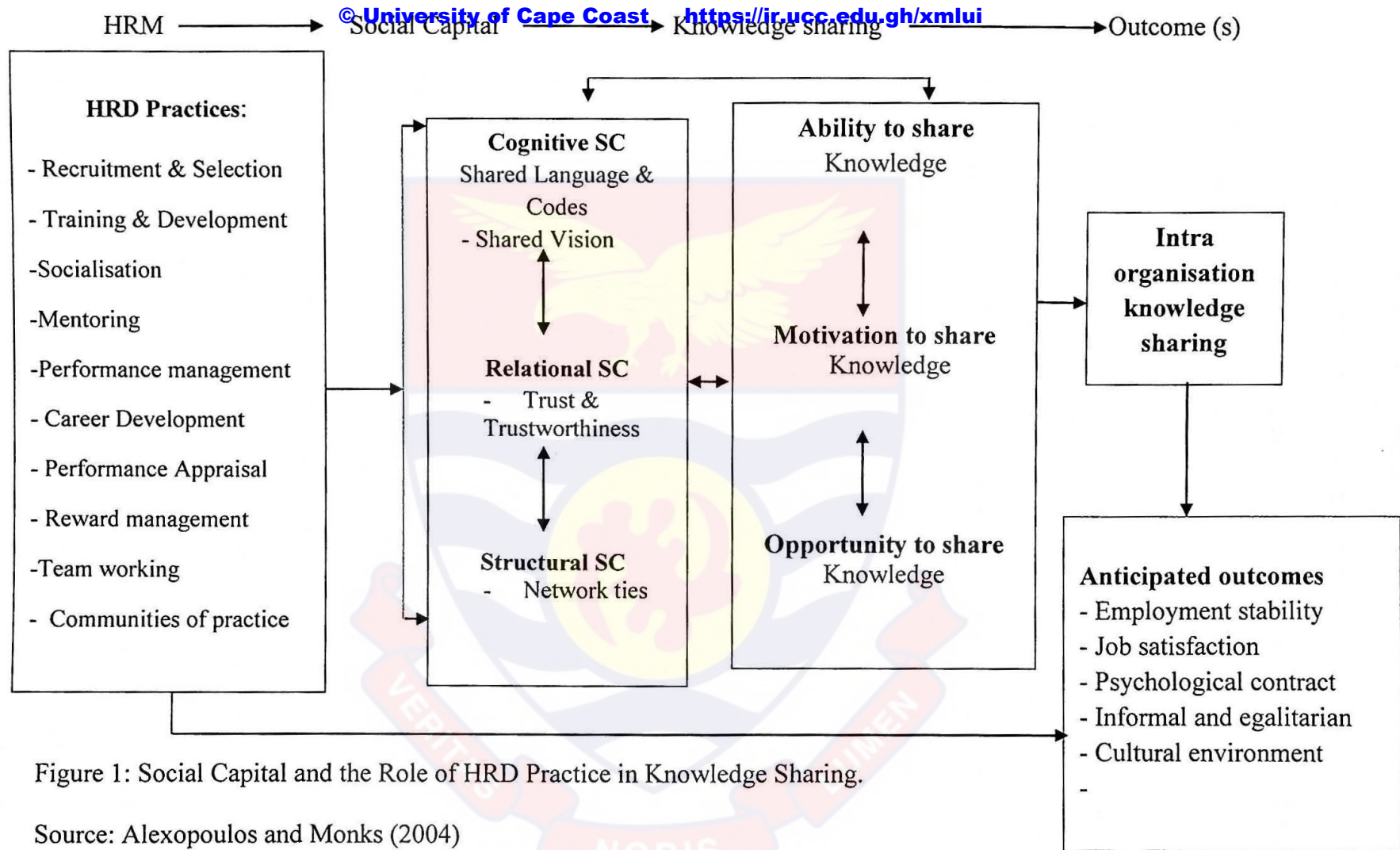


Figure 1: Social Capital and the Role of HRD Practice in Knowledge Sharing.

Source: Alexopoulos and Monks (2004)

Applicability of Social Capital to HRD Practice

A more comprehensive work on social capital and its applicability to human resource development practice was offered by Brooks and Nafukho (2006). Following a literature search of accessible and available material, and using the key words “human resource development”, “emotional intelligence”, “social capital”, “human capital”, “organisational productivity” and “organisational performance”, the authors conceptualised an integrated model that investigated the interconnectivity of these variables. The reviews relied heavily on desk analysis of literature available on the internet (e.g. PROQUEST, EBSCO, WebSPRIS, and INGENTA).

Two key points were identified in Brooks and Nafukho’s (2006) study. The major point was that although the meaning of HRD remains controversial, all attempts to define the concept are inclined towards the changing needs, interests, and values of group members and the group itself. Critical to HRD, therefore, is the understanding of how the various organisational facets interact to produce the desired goods and services. This calls for collaboration, networking, partnership, interaction, and knowledge sharing through various HRD programmes (Brooks & Nafukho, 2006). The second key point was that in today’s business environment, characterized by uncertainty and inevitable change, the organisation can only remain competitive and succeed if HRD professionals develop their stock of social capital, and link this into the HRD practice (Brooks & Nafukho, 2006). Following these arguments, the authors proposed a model for integrating HRD, emotional intelligence (EI), social capital (SC) and organisational productivity (OP), as shown in Figure 2.

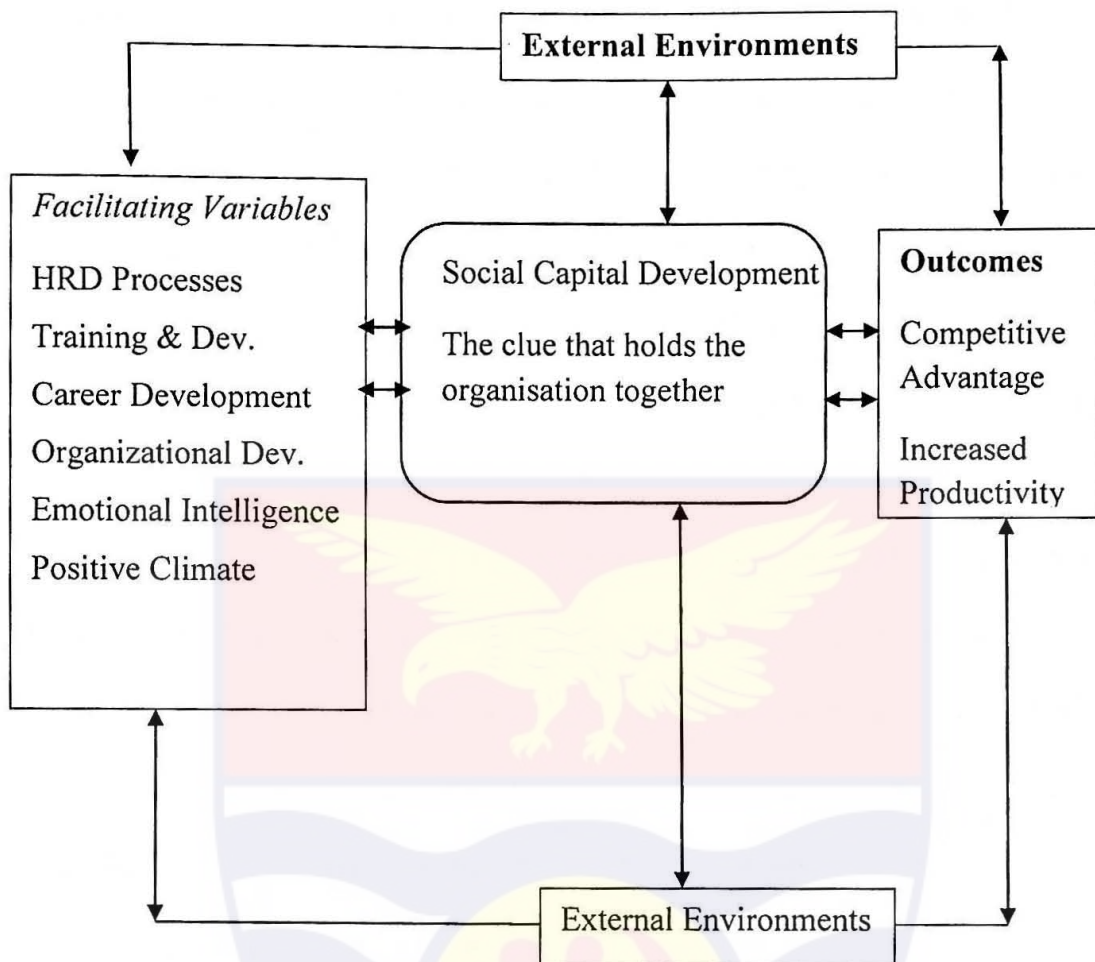


Figure 2: Integrating HRD, EI, SC and OP

Source: Brooks and Nafukho (2006).

Based on this review, the authors concluded that while management have paid greater attention to the critical role of HRD in organisations, attention should also be given to the more advancing or evolving intangibles, such as social capital and emotional intelligence of employees, as these greatly contribute to organisational development and growth (Cohen & Prusak, 2001).

Another study that focused on the applicability of social capital to HRD practice was conducted by Hatala (2006). In this study, Hatala (2006) relied on the review of relevant literature to establish the proposition that social network analysis (SNA) can improve the empirical rigor of HRD in such areas as organisational development, organisational learning, leadership

development, organisational change, and training and development (Hatala, 2006). An exhaustive literature from sociology, anthropology, psychology and political science was reviewed on social network analysis from “the ACM Digital Library, EBSCO Host’s Academic Search Primer, Business Source Primer, the Psychinfo, and Social Index Data-Basis” (Hatala, 2006, pp. 48).

Following this review, Hatala (2006) argued that, in dealing with human capital issues, it is not enough for HR professionals to concentrate on the individualistic components of the firm; they must also pay attention to the relationships that impact on the ability of individuals to function as a unit. Though the individual’s behavior is a reflection of his or her background, specific behavioural responses cannot accurately be predicted without knowledge of the context in which the individual or group functions:

It is, therefore, important for HRD practitioners to understand the interpersonal relationships in organisations as these help them to know the impact contextual factors have on employee response to the work environment (Hatala, 2006, p. 45).

Based on his findings, Hatala (2006) concluded that HR professionals have much to gain by utilising social network analysis. He argued that the identification of social structures within an organisational context will further their understanding of why individuals act and respond differently to specific HRD inputs and interventions. For instance, by analysing the available social networks in the organisation, an HRD professional can reexamine the relational ties that affect the flow of information, resources, knowledge and attitudes among individuals before introducing an HRD intervention.

Much like Hatala (2006), Storberg and Gubblins (2007) investigated the network perspective and how it is connected to contemporary HRD. In their study, the authors argued that “the emerging challenges facing HRD include developing not only the human capital of organisations, but also the social capital or the asset value of human relationships” (Storberg & Gubblins, 2007, p. 292).

Drawing on the analysis of a diverse array of conceptual and empirical social network and social capital research, Storberg and Gubblins (2007) noted that, while effective organisational functioning requires employees to be in the right place doing the right things at the right time, the social network perspective adds value to organisational effectiveness by changing the social relationships that bridge different people or groups to one another. In justifying this stand, Storberg and Gubblins (2007, p. 298) argued that HRD interventions can add value only if they either leverage social capital or change social networks to align with organisational goals, and this alignment facilitates organisational identity (Ibarra, Kilduff & Tsai, 2005), improves relevant knowledge transfer (Hansenn, 1999), allows for high performance work changes (Gant, Ichniowski, & Shaw, 2002), and supports learning (Rhee, 2004) among others.

Storberg and Gubblins (2007), however, cautioned that social capital that is valuable at one context may be detrimental in another (Adler & Kwon, 2002), and that HR professionals must assess or evaluate the context in order to leverage or generate the most appropriate social capital. Following these arguments, the authors concluded that HRD professionals can improve

individual and unit performance only when they pay attention to the interactions that impact the ability of individuals to function as a unit.

Social Capital as a Key to Organisational Success

The increased importance of social networking competency in human resource development has been redirected to organisational growth and development by Krebs (2008) and Korte (2011).

In a study that purported to identify the key to success for the 21st Century organisation, Krebs (2008) observed that contemporary organisations cannot compete on individual competency. According to the author, the ability to find, utilise, and combine the skills, knowledge and experience of others will be the measuring rod by which HRD professional of contemporary business will be judged. Krebs's (2008) proposition is that social capital is what connects various forms of human capital in the organisation. The HRD professional's role, therefore, is to network and integrate all units of the organisation into the value chain so that their combined human and social capitals provide excellent returns to the organisation. It is this pattern of relationships and connections that produces advantage for one organisation and constraints for another. He concluded that contemporary HRD practice does not focus on ownership of resources, but access.

Gubbins and Garavan (2009) have also explored the importance of social networking competency to HRD practice. They argue that, while the HRD function plays a central role in today's competitive global business environment, organisations can achieve competitive advantage only when HRD professionals have the social networking competency, and can,

therefore, perform their roles in a way that adds value to organisational performance. In their opinion, organisational success depends on the ability of employees to access requisite benefits, such as tacit and explicit knowledge, information, resources and support. These benefits require the HRD professional to build relationships, social networking, communication, and interpersonal skills. On the basis of this review, the authors concluded that the forces of globalisation are changing the work environment and roles played by HRD professionals. Hence, it is imperative to integrate social capital in HRD practice in contemporary business.

In an attempt to explore the philosophical and foundational theories that underpin research and practice in human resource development for organisational success, Korte (2011) proposed that, because social forces arbitrate the thoughts and behaviours of employees in an organisation, there is the need for the HR professional to adopt a framework for approaching human resource development from the perspective of the social realm. According to Korte, individuals live and work in groups, teams, networks, organisations, and societies. Contemporary HRD requires the HRD professional to concentrate on the complex, social and relational world as the arbiter of this individual agency. The author proposed a framework of key concepts pertaining to the social world that are relevant to HRD practice, as presented in Figure 3.

Korte's argument is that, as long as the focus of HRD is on the thoughts and behaviours of people in organisations, the foundations of HRD are, by definition, grounded in the social realm". Buttressing this stand, he argues that "organic human bodies become recognised as people because of

their interactions with others” (Korte, 2011, p. 6). Hence, studying and practicing HRD from predominantly social and relational perspective provides meaning and fulfillment to employees in the organisation.

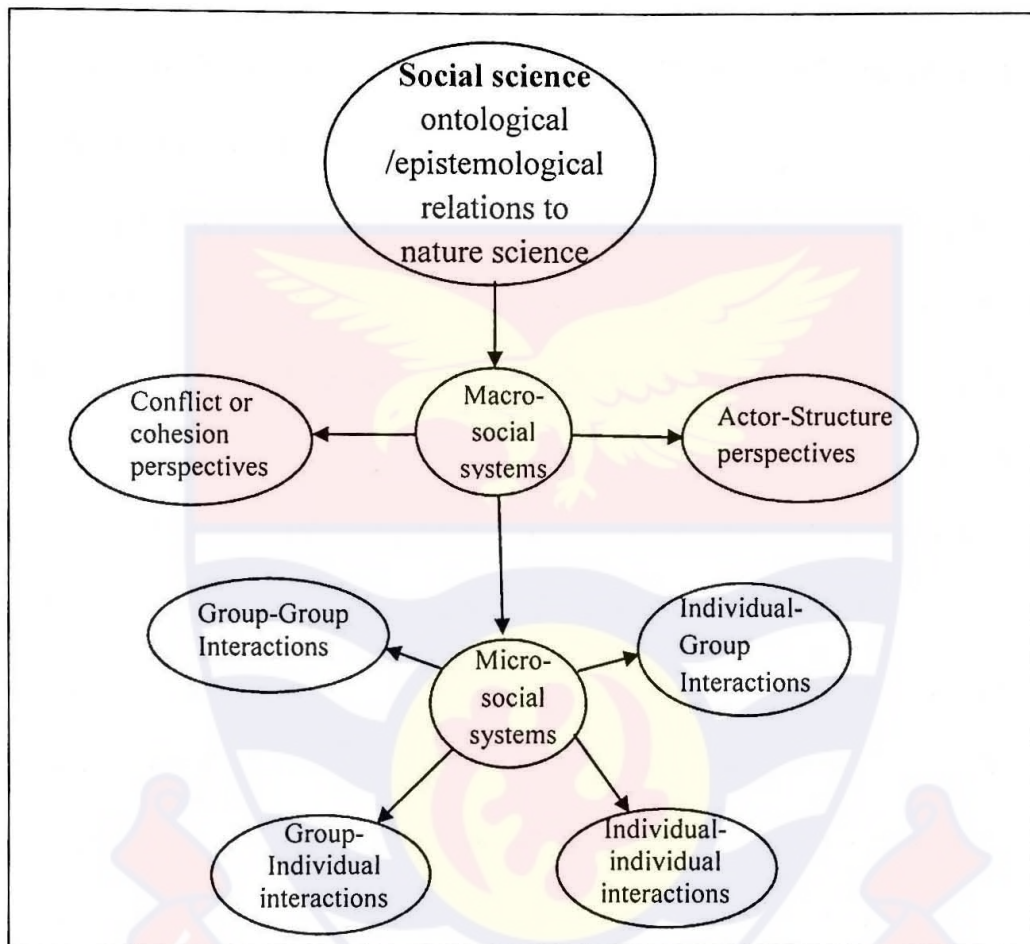


Figure 3: Conceptual Map of the Social Realm Relevant to HRD Practice

Source: Korte (2011).

Lessons Learnt from Empirical Review of Literature

Four key lessons have been learnt from the empirical literature. First, not much has been done in Africa about the relationship between social capital and human resource development. Almost all the studies were conducted in advanced countries, especially the US. Conducting an exploratory case study of firms in the sawmill industry in Ghana will fill this gap.

Second, most studies on social capital and human resource development appear to dwell much on literature search, focusing mainly on the conceptual and theoretical issues rather than empirical research. This observation has necessitated the present study. In the opinion of the author, an empirical study of social capital and HRD will enhance knowledge of the relationship between the two concepts.

Third, the influences of globalisation, multi-national corporations, and other drivers of change have radically altered the role of the contemporary HRD professional. As noted by Gilley, Quatro and Lynham (2003, p. 3), the global HRD professional faces a number of additional challenges, including “working with cultural diversity and conflicts, different styles of leadership and decision-making, geographically dispersed physical and human entities, global coordination and control requirements, as well as maintaining communication richness over distance”. All these additional challenges require the HR professional to adopt new roles in the form of strategic business partnering, most notably social networking competency.

Fourth, the field of HRD has slowly shifted its focus from the individual to a greater consideration of inter-connected resources between individuals. This change in focus is due to the recognition of the increasing role of social capital in HRD practice.

Conceptual Framework for Social Capital and HRD Practice

On the basis that HRD is a component of HRM, the conceptual model in Figure 4 was adapted for this study. The model was originally developed by Alexopoulos and Monk (2004). The framework was based on the assumption

that the integration of social capital in HR practice (Not HRD practice) enables an organisation to benefit from information flow, knowledge sharing, resource exchange and support among members. Alexopoulos and Monks' (2004) model was chosen, among others, because, unlike the many models identified in the literature that purport to explain the link between social capital and HRD practice, the authors went further to specifically define the various HRD activities whose performance require the integration of social capital in the HR function.

The conceptual framework for the study provides a broad view of the integration and contribution of social capital in HRD practice. The model suggests that HRD practice, in the midst of the cognitive, relational and structural types of social capital, tends to improve the ability of employees to share important resources, such as information and knowledge, which in turn, improves capacity utilisation, organisational development and productivity. HRD practices are the HR functions or activities that promote the efficient and effective deployment of human resources in the organisation. They include, but not limited to, recruitment and selection, training and development, career development, performance appraisal, compensation and reward, as well as health and safety.

The model suggests that, in performing their functions, HRD professional must not only focus on the within-employee factors but also the between-employee factors; the connections that encompass communities of practice, including knowledge sharing, resource exchange, information flows, support and other emergent connections between employees, suppliers, regulators, dealers, intermediaries, customers, partners and even competitors.

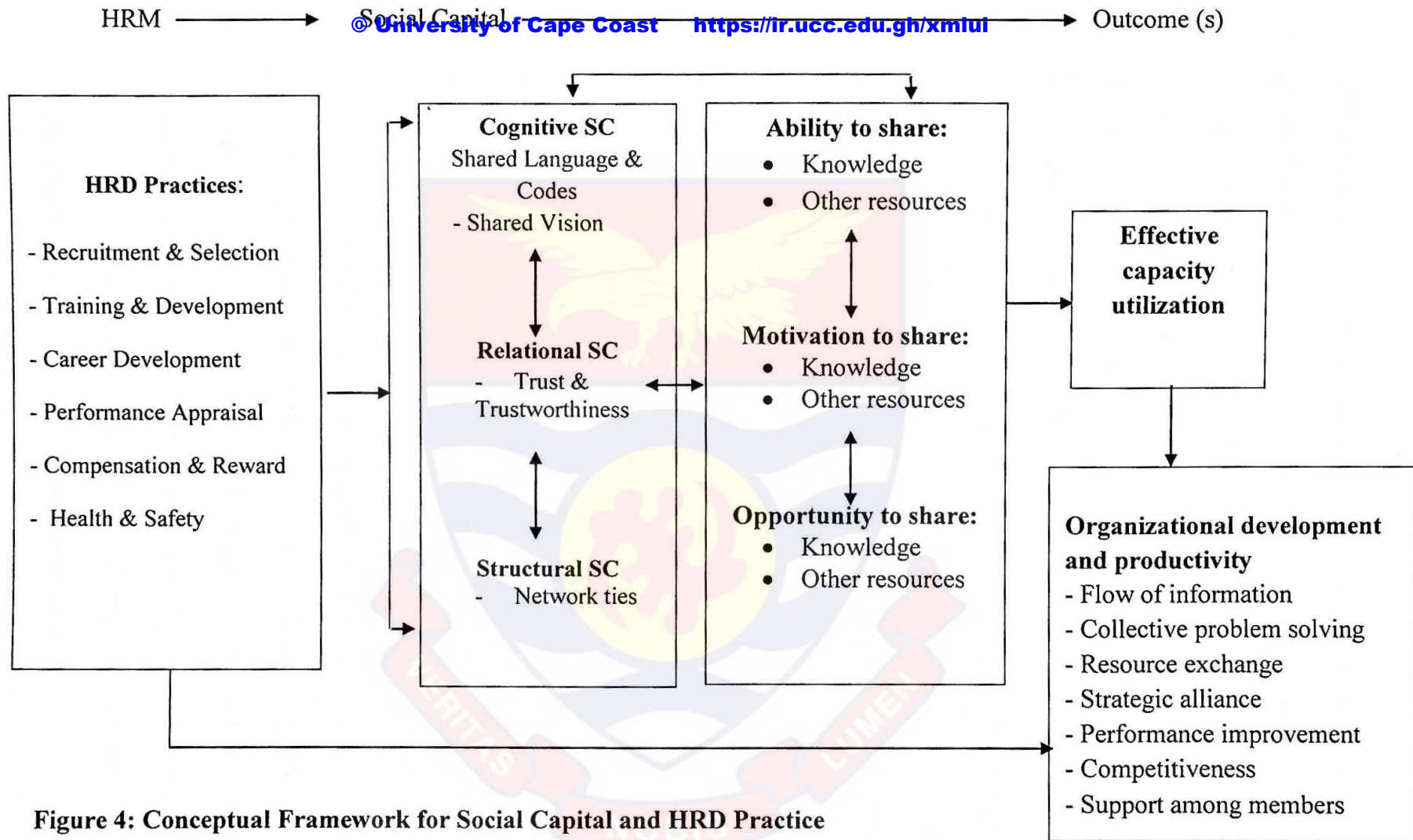


Figure 4: Conceptual Framework for Social Capital and HRD Practice

Source: Adopted from Alexopoulos and Monks (2004)

The model recognises the social nature of people, and therefore, the need to ground HRD practice in the social realm. The social is important because even though it is the property of the individual, it is formed and conditioned by the group, organisation or the society in which the individual lives and works (Korte, 2011). As noted by Glaeser (2005), organic human bodies are recognised as people because of their interaction with others.

The model also suggests that the stock of social capital available to an organisation depends on trust and trustworthiness among members (relational social capital), the network of ties (structural social capital) and shared vision (cognitive social capital). These forms of social capital are those that improve the ability, motivation and opportunity to share knowledge and other important resources among members in the organisation. The exchange of resources creates the interdependence between employees, establishing new benefits and obligating employees to make continuing contributions to their partnership with other employees. The employees' ability to transfer knowledge and other resources creates the avenue for an improved human capacity utilisation that reduces the average cost per resource employed in the organisation (Stam & Elfringe, 2008).

Finally, the framework suggests that effective human capacity utilisation is the driving force behind organisational development and productivity. This, according to Glaeser (2005), is possible because HRD practice that results in effective human capacity utilisation is capable of promoting collective problem solving, information flow, resource exchange, strategic alliance, competitiveness, performance improvement and support among members.

CHAPTER FIVE

METHODOLOGY

Introduction

This chapter discusses the methods and procedures used to gather and analyse data for the study. The chapter is organised into twelve sub-headings, including the research philosophy, study area, methodological approach to the study, research design, study population, sampling procedures, sources of data, data collection instruments, pretesting of data collection instruments, fieldwork, data processing and analysis, and ethical considerations.

Research Philosophy

According to Bryman (2004, p. 453), “a research paradigm or philosophy is a set of beliefs that prescribes how research in a particular discipline should be implemented and how the results should be interpreted”. Paradigms encompass the general orientations of a research, and define the theories that underpin the research methods and interpretations (Tashakkori & Teddlie, 2010).

A good number of research philosophies exist in social science research. According to Leedy and Ormrod (2010), however, many social scientists tend to agree on two philosophies: the positivist and the interpretive paradigms. Guba and Lincoln (1994) apply the terms scientific and naturalistic to these paradigms, while Tashakkori and Teddlie (2010) prefer the terms positivist and constructivist. Each of these paradigms has its own belief as to how data about a phenomenon should be gathered, analysed and used (Bryman, 2004). According to Tashakkori and

Teddlie (2010), the nature and underlying ontological and epistemological positions of the two paradigms have been a great source of debate in social science research.

Positivists believe that reality is stable and can be observed and described from an objective point of view without interfering with the phenomenon being studied (Cohen, Manion, & Morrison, 2007). The term positivist was coined by a French philosopher Auguste Comte in 1822 based on the view that society could be observed and explained logically and rationally, and that social science research could be as scientific as biology or physics (Babbie, 2007). Positivism has a long and rich history in social science research; it is only in recent decades that positivism has been seriously challenged. This view has indirectly been supported by Alavi and Carlson (1992), who, in a review of 902 journal articles, found that all the empirical studies were positivist in their approach (Alavi & Carlson, 1992). Positivists often prefer quantitative data collection and analysis, using the experiment or survey instruments.

Positivists see social science research as fundamentally the same as natural science research; it assumes that social reality is made up of objective facts that researchers can precisely measure, using statistics to test casual relationships. Positivists emphasise replication and the ultimate test of knowledge. They believe that different observers looking at the same facts will get the same results if they carefully specify their ideas, precisely measure the facts, and follow the standards of objective research (Leedy & Ormrod, 2010; Neuman, 2004).

Positivists may use the inductive or deductive inquiry, but the ideal procedure is to develop a general causal law or principle, then use logical deduction to specify how it operates in concrete situations. Consequently, the positivist paradigm has been described as “nomothetic” as it uses laws or law-like principles in its investigations (Neuman, 2004).

In spite of the proven success enjoyed by positivism in the natural and social sciences, its ontological and epistemological bases have vehemently been criticised. According to the critics, positivism is mechanistic and reductionist in nature, thereby defining life in measurable terms, and excluding notions of choice, freedom, individuality and moral responsibility (Cohen, Manion, & Morrison, 2007). Consequently, attention was drawn to the interpretive philosophy.

The interpretive philosophy contends that the only way reality can fully be understood is through subjective interpretation of, and intervention in the reality being studied (Newman, 2004). In the context of the interpretive paradigm, the central tenet is to understand the subjective world of human experience (Cohen, Manion, & Morrison, 2007). The goal of research, according to the interpretive philosophy, therefore, is to rely as much as possible on the participant's views about the phenomenon (Creswell & Clarke, 2007). As a result, the researcher is required to retain the integrity of the phenomenon being investigated by making efforts to get inside the person or situation, and to understand them from within. In this way, the imposition of external form and structure, as in the positivist paradigm, is resisted, since this reflects the view point of the observer and not the actor who is directly involved in the study (Blaikie, 2000).

Unlike the positivist approach, interpretive researchers hold the view that human social life is qualitatively different from other things that are studied in the physical sciences (Babbie, 2007; Neuman, 2004). Consequently, they believe that the social scientist cannot completely borrow the principles of natural sciences. In the opinion of the interpretive researcher, a special type of science is required to meet the uniqueness of human social life (Cohen, Manion, & Morrison, 2007).

Interpretive researchers view social reality as being very fluid. For this reason, they tend to trust and favour qualitative methodologies as being capable of capturing the fluid processes of social life (Leedy & Ormrod, 2010). It is on this basis that the interpretive researcher becomes sceptical about the positivist's attempt to produce quantitative measures of social reality (Neuman, 2004).

The interpretive paradigm has been criticised on grounds that the ability of the researcher to acquire the true picture of social reality depends on whether one can demonstrate that the research has actually captured the inner world, imitate worldview, and personal perspective of the people studied (Cohen, Manion, & Morrison, 2007).

Following the controversy between the two philosophies, academic research began to confine their studies on either the quantitative or qualitative orientations, underpinned by their respective positivist or interpretive beliefs. This era of research was described as the mono-method regime (Tashakkori & Taddlie, 2010; Creswell, 2003). The mono-method approach was challenged in the 1960s. Critics observed that many research questions could not be handled through a purely qualitative or purely quantitative approach (Bryman, 2004). This led to the

adoption of a third paradigm - the mixed methods approach - which combined both qualitative and quantitative methodologies in a single-dimensional approach.

Some scientists do not agree to the viability of mixed methods research (Tashakkori & Taddlie, 2010). They are known as 'the compatibility theorists'. According to these theorists, because the differences between positivism and interpretive ideas are entirely conflicting, it is not possible to conduct research that combines both qualitative and quantitative methodologies in a single-dimensional approach (Bryman, 2004). This marked the emergence of the pragmatic paradigm which applied "what works well tactics" to the positivist and interpretive paradigms by relating paradigms to specific research questions based on their nature or orientation in a particular study (Creswell, 2003). The underlying tenet of the pragmatic paradigm is that different research questions require different research methodologies, meaning that the match or fit between research questions and research methods is a central criterion in the validity of a research study (Babbie, 2007).

Following the preceding review, the positivist and interpretive research philosophies have been adopted for this study. The rationale for combining both philosophies in this study derives from the assertion that:

Complex social phenomena require different kinds of methods so as to best understand and make inferences about these complexities. Such social phenomena cannot be fully understood using either purely qualitative or purely quantitative techniques. We need a variety of data sources and

analyses to completely understand complex multifaceted institutions or realities. Mixed methods can provide that (Tashakkori & Teddlie, 2003, p. 16).

Social capital and human resource development are both complex and dynamic variables that defy any definitions or boundaries. Though much consensus has been reached about these variables, divergent views have been expressed by most researchers (Yuan & Gay, 2006; Lee, 2001). Consequently, by using both philosophies, it is possible to blend their complementary strengths in providing more information on the variables of interest.

Study Area

Three criteria were used to identify a suitable research setting for this study. They were: (1) large-scale sawmill firms that export at least 80 percent of their timber products to foreign markets, with employee population of 500 or more; (2) medium-scale sawmill firms whose major function is to harvest the logs from the forest and sell to the export-focussed companies, with employee population of more than 100; and (3) small-scale sawmill firms that feed the domestic market, with employee population of 100 or less. As a result, the most suitable areas for the study were those where one could find, at least, three sawmill firms, each exhibiting a different criterion. Based on these criteria, the Ashanti and Western Regions were selected for the study.

The Ashanti Region is located in the middle belt of Ghana. It lies between longitude 0.15°W and 2.25°W , and latitudes 5.50°N and 7.46°N , and covers about

24,390 square kilometres which is about 10.2 percent of the total land area of Ghana. The region shares boundaries with the Brong Ahafo Region to the north, the Eastern Region to the east, the Central Region to the south, and the Western Region to the west. The dominant economic activity in the Ashanti Region is agriculture (44.5%). This is followed by wholesale and retail trade (18.4%), manufacturing (12.2%), and community, social and personal services (9.9%). Other activities include: mining; timber processing; and small-scale processing of agricultural products (Ghana Statistical Service, 2002).

The Ashanti Region has both forest and savannah vegetations. A greater part of the region, particularly the south, is covered by semi-deciduous forest, while the north-eastern part, due to human activity and bushfires, is reduced to the open savannah vegetation (Guinea savannah). The guinea savannah vegetation consists of tall grasses, such as the *Andropogon*, *Plasmodium*, and *Rottbela* which are interspersed with short fire-resistant tree species like the *Damela*, *Vitex* and *Lophira* (Paulus, 2009). The forest part of the region consists of trees with thick corky barks that are generally scattered due to logging activities. Common economic trees include *Odum*, *Wawa*, *Sapele* and other lesser-known species. The region has an average annual rainfall of 1,270 mm and two rainy seasons (Ayarkwa, 2009).

The Western Region is located in the south-western part of Ghana between latitudes 5°N and 30°N , and longitude 3°W and 32°W . It is bordered by Ivory Coast to the west, Central Region to the east, Ashanti and Brong Ahafo Regions to the north, and the Gulf of Guinea to the south. The region covers an

24,390 square kilometres which is about 10.2 percent of the total land area of Ghana. The region shares boundaries with the Brong Ahafo Region to the north, the Eastern Region to the east, the Central Region to the south, and the Western Region to the west. The dominant economic activity in the Ashanti Region is agriculture (44.5%). This is followed by wholesale and retail trade (18.4%), manufacturing (12.2%), and community, social and personal services (9.9%). Other activities include: mining; timber processing; and small-scale processing of agricultural products (Ghana Statistical Service, 2002).

The Ashanti Region has both forest and savannah vegetations. A greater part of the region, particularly the south, is covered by semi-deciduous forest, while the north-eastern part, due to human activity and bushfires, is reduced to the open savannah vegetation (Guinea savannah). The guinea savannah vegetation consists of tall grasses, such as the *Andropogon*, *Plasmodium*, and *Rottbela* which are interspersed with short fire-resistant tree species like the *Damela*, *Vitex* and *Lophira* (Paulus, 2009). The forest part of the region consists of trees with thick corky barks that are generally scattered due to logging activities. Common economic trees include *Odum*, *Wawa*, *Sapele* and other lesser-known species. The region has an average annual rainfall of 1,270 mm and two rainy seasons (Ayarkwa, 2009).

The Western Region is located in the south-western part of Ghana between latitudes 5°N and 30°N , and longitude 3°W and 32°W . It is bordered by Ivory Coast to the west, Central Region to the east, Ashanti and Brong Ahafo Regions to the north, and the Gulf of Guinea to the south. The region covers an

area of about 23,921 square kilometres, which is approximately 10 percent of Ghana's total land mass (Paulus, 2009).

Agriculture is the mainstay of the region's economy, employing about 70 percent of the economically active population, and accounting for about 60 percent of the regions' total GDP (Ghana Statistical Service, 2002). Other economic activities include fishing (both commercial and subsistence), timber processing, mining, and manufacturing. The main exportable produce includes cocoa, timber, copra, coffee, rubber/latex, gold, manganese, and bauxite.

The Western Region has about 75 percent of its vegetation within the high rain forest zone, covering several hectares of rubber plantation. Other economic trees in the Western Region include Mahogany, Odum, Koto, Wawa, Emire and Asanfina (Ayarkwa, 2009). The Western Region is the wettest part of Ghana, with an average rainfall of 1600 mm per annum. Owing to constant bushfires and human activity, the Western region, which used to be a high rain forest zone has been reduced to secondary forest, except the area within the Cape Three Points Forest Reserve which occupies an area of 51.02 square kilometres. The region has 192 square kilometres of tropical beaches on the Atlantic Ocean, and a tropical climate characterised by moderate temperatures all year round. A map of Ghana showing the two regions is provided in Figure 3.

In terms of natural resource base, the Ashanti and Western Regions in Ghana are endowed with almost equal proportion of minerals, timber, soil constitution, rainfall pattern, animal husbandry and foodstuff (Paulus, 2009).

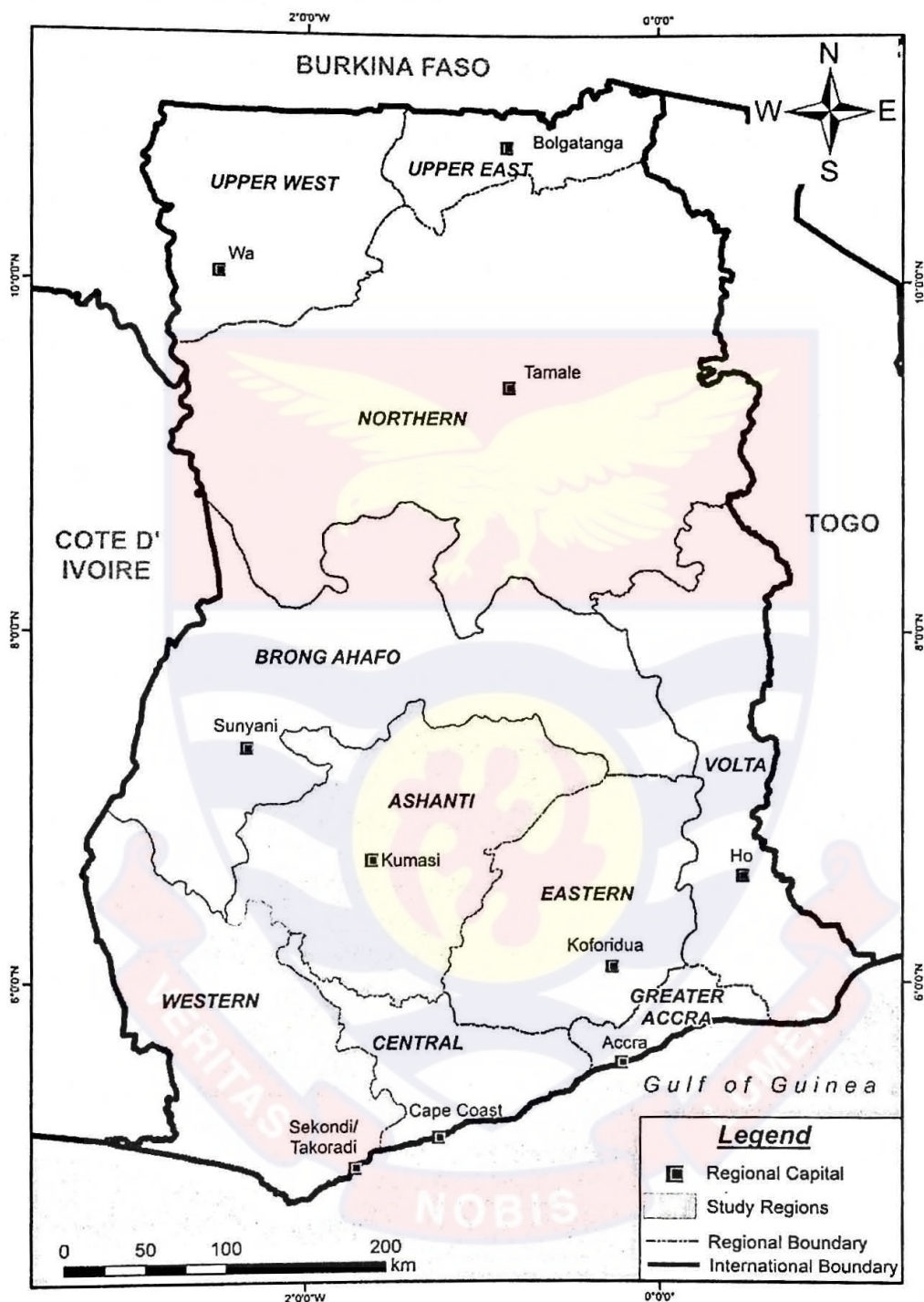


Figure 5: Map of Ghana Showing the Ashanti and Western Regions

Source: GIS, Remote Sensing and Cartography Laboratory, Department of Geography and Regional Planning, University of Cape Coast (2015).

Typically, a quantitative researcher begins with a set of hypotheses or research questions (prior to conducting the research) based on a theory that he intends to test in order to either support or not support the hypotheses formulated (Bui, 2009). Almost all quantitative researchers rely on the positivist approach to social science research; they follow a linear research path, use experiments, surveys, and statistics, and test hypotheses in order to predict general patterns of human activity (Neuman, 2004).

In contrast, the qualitative research is naturalistic as it attempts to study social reality in its natural settings. The qualitative researcher uses non-numeric data to make sense of, or interpret phenomenon in terms of the meanings held by groups of people and communities being studied (Leedy & Ormrod, 2010). Qualitative studies are designed to help researchers to understand the complexities and differences between people, and the social and cultural contexts in which they live. In qualitative research, there is usually uncertainty about dimensions or the characteristics of the study problem (Domegan & Fleming, 2007). Qualitative research is fundamentally interpretive, following a non-linear research path, and speaking a language of cases and contexts (Neuman, 2004).

The qualitative researcher is the primary instrument of data collection and analysis, making sense of the multiple interpretations he comes across, and studying social reality as events naturally unfold without predetermined constraints or conditions that control the study or its outcomes (Domegan & Fleming, 2007). Baskerville and Myers (2009) and Creswell (2003), therefore,

postulate that the researcher's ability to interpret and make sense of what he sees is critical for understanding any phenomenon.

Many researchers view quantitative and qualitative research as separate paradigms (Guba, 1990). However, while the two forms of research may differ on the basis of philosophical merits, they often complement each other as well. It is on this basis that this study is framed within the mixed methods paradigm. The mixed methods is the approach that combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single or multi-phased study (Johnson & Onwuegbuzie, 2004, p. 17). It has three main characteristic features that set it apart from other strategies of social research (Denscombe, 2007): emphasis on practical approaches to research problems (Pragmatist); use of qualitative and quantitative approaches within a single research project; and explicit focus on the link between approaches.

The mixed methods strategy blends the complementary strengths of both quantitative and qualitative perspectives in a study (Punch, 2005). By using multiple forms of validation and providing more information than either of these perspectives alone can offer, the mixed methods strategy facilitates the incremental building of knowledge, increases the methodological rigor of a study, and ultimately adds value to a study in terms of its overall persuasiveness or practical applications (Ridenour & Neuman, 2008).

Furthermore, the mixed methods strategy adds to the credibility of outcomes as the quantitative data analysis is supported or supplemented by the qualitative data analysis in providing answers to the research questions

(Baskerville & Myers, 2009). While the mixed method strategy offers important advantages, it also poses a number of challenges, “including the need for an extensive data collection, the time-intensive nature of analysing both text and numeric data, and the requirement for the researcher to be familiar with both quantitative and qualitative forms of research” (Creswell, 2003, p. 210).

Research Design

Taking into account the preceding ontological and epistemological positions and challenges, the first task was to select the most appropriate research design that would enable the author to answer the research questions, and make better and more accurate inferences without losing greater breadth. Colloquially, Yin (2003) defined a research design as an action plan for getting researchers from here to there, where “here” is defined as the initial set of questions to be answered, and “there” is some set of conclusions (answers) about these questions. In between “here” and “there” may be found a number of major steps, including the collection and analysis of relevant data (Yin, 2003). A research design may also be defined as the plan, structure and strategy of investigation employed by the researcher in order to obtain appropriate answers to a set of research questions (Kerlinger & Pedhazur, 1973, cited in Blaikie, 2000, p. 37).

Creswell and Clarke (2007) and Babbie (2007) have identified the three primary designs that have typically characterised social science research: exploratory; descriptive; and explanatory designs. In the exploratory design, the main emphasis is on gaining ideas and insights into social reality (Creswell &

Clarke, 2007). The main objective of the exploratory design is to identify key issues and variables in a real-world situation.

The descriptive design seeks to provide accurate description of observations about a particular phenomenon (Creswell & Clarke, 2007). A typical feature of descriptive designs is that they often help researchers to provide similarities, comparisons and contrast between phenomena, thereby adding immeasurably to our knowledge of social reality (Babbie, 2007).

The explanatory design focuses on “why questions” in an attempt to understand the relationships that exist between variables (Babbie, 2007). Answering the why questions involves developing casual relationships, such as phenomenon *Y* (e.g. income level) is affected by phenomenon *X* (e.g. gender).

Following the preceding arguments, and considering the methodological requirements addressed in the study, the researcher chose the descriptive and exploratory survey designs. A survey is a useful scientific tool for “acquiring information about one or more groups of people, perhaps about their characteristics, opinions, attitudes, or previous experience” (Leedy & Ormrod, 2010, p. 187).

The descriptive and exploratory survey designs were deemed appropriate because the study was conducted to explore and describe the contribution of social capital to human resource development practice in the sawmill industry in Ghana. Such a study requires the researcher to observe existing patterns of behaviour, why they occur, and what they imply (Punch, 2005).

1,100 from the medium-scale firms and 150 from the small-scale firms, as shown in Table 2.

Table 1-Distribution of Non-Managerial Staff in Registered Sawmill Firms in the Ashanti Region

Sawmill firm	Number	Percent
Large-scale operation (2,500)		
• Naja David Veneer & Plywood	1000	24.8
• Logs & Lumber Ltd	1000	24.8
• A G Timbers Ltd	500	12.4
Medium-scale operation (870)		
• Bibiani Logging & Lumber Co	250	6.2
• Kumi & Company Ltd	200	5.0
• Fares Timber Processing Ltd	150	3.7
• Loggs Court & Co Ltd	150	3.7
• Specialised Timber Products Ltd	120	2.8
Small-scale operation (670)		
• Ashanti Curl & Lumber Products	100	2.5
• Evans Timber Ltd	100	2.5
• Fabi Timbers Ltd	100	2.5
• Maxwell Owusu Timbers Ltd	100	2.5
• Logwood Industries Ltd	60	1.5
• Modern Wood Technology & Co	60	1.5
• SOM Company Ltd	50	1.2
• Sunstex Company Ltd	50	1.2
• Wood Pillar Ltd	50	1.2
Total	4,040	100.0

Source: Ghana Timber Millers Organisation (2014)

Table 2-Distribution of Non-Managerial Staff in Registered Sawmill Firms in the Western Region

Sawmill firm	Number	Percent
Large-scale operation (2,800)		
• Samartex Timber & Plywood Ltd	1200	29.6
• John Bitar & Co Ltd	800	19.8
• Suhuma Timbers Company Ltd	800	19.8
Medium-scale operation (1,100)		
• Ghana Primewood Products Ltd	400	9.8
• Intex Company Ltd	300	7.4
• Dupaul Wood Treatment (Gh) Ltd	250	6.2
• Swiss Lumber Ltd	150	3.7
Small-scale operation (150)		
• Mondial Veneer (Gh) Ltd	100	2.5
• Pas Timbers Ltd	50	1.2
Total	4,050	100.0

Source: Ghana Timber Millers Organisation (2014)

Samartex Timber and Plywood Limited had the greatest number of employees in the Western Region. It had 1,200 employees. This was followed by John Bitar & Co Ltd and Suhuma Timbers Company Ltd. Each had 800 staff.

Sampling Procedures

In view of the limited time and resources at his disposal, the researcher sampled 367 respondents for the study: 237 non-managerial employees from a total population of 8,090; 26 HRD professionals; and 104 line managers, following stringent sampling procedures as required in social science research. The purposive sampling technique was used to select the Ashanti and Western

Regions for the study. The two regions were purposively selected because, in addition to being the leading areas for timber operations in Ghana, each had the three major categories of sawmill firms the researcher intended to study.

All firms that registered with the Ghana Timber Millers Organisation from the Ashanti and Western Regions were selected for the study. The sample in this study was disaggregated into three categories of large, medium and small-scale firms in order to address the fact that there is variance between the operations of each category. These included: the six sawmill firms (large-scale) that exported at least 80 percent of their timber products to foreign markets; the nine sawmill firms (medium-scale) which harvested the logs from the forest and sold them to the export focussed-companies; and the 11 locally-owned domestic market companies (small-scale) which fed the local market. The inclusion of all firms was meant to ensure adequate representativeness.

The selection of non-managerial employees for the study was done using a series of sampling techniques, each of which was employed at various stages of the sampling process. Given the total population of 8,090, a sample size of 237 (see Table 3) was obtained at 95 percent confidence level, using Krejcie and Morgan's 1970 sample size determination formula, as shown below:

$$SS = \frac{X^2 NP(1-P)}{d^2(N-1)} + X^2 P(1-P)$$

Where:

X = the table value of chi-square for 1 degree of freedom (1.96);

N = the population size;

P = the population proportion which is computed as $8,090/10,000 = 0.81$; and

d = the degree of accuracy desired, usually set at (0.05);

SS = the sample size.

These figures were substituted into the formula to determine the sample size for the study as follows:

$$\begin{aligned}
 \text{Sample Size (SS)} &= \frac{1.96 \times 1.96(10,000 \times 0.81)(1 - 0.81)}{0.05 \times 0.05(10,000 - 1)} + 3.84 \times 0.81(1 - 0.81) \\
 &= \frac{5911.3}{24.9975} + 0.590976 \\
 &= 236.47 + 0.590976 \\
 &= 237
 \end{aligned}$$

Thus, this study met the minimum sample size as required in social science research. The sample size was deemed to be representative because according to Hair, Anderson and Tatham (1987), a sample size of at least 100 subjects is recommended to conduct a test of statistical significance.

The next stage of the sampling process involved getting a representative number of non-managerial employees from each of the selected firms. In that regard, the proportionate sampling technique was used based on firm size. The proportionate sampling was used because the target population was composed of several subgroups that were vastly different in size, character and number (Creswell, 2003). The proportion of non-managerial employees in each firm in relation to the total population of 8,090 was computed, and this was multiplied by the sample size of 237 to arrive at the number of respondents from each firm. For

instance, the number of respondents chosen from Naja David Veneer & Plywood Ltd in the Ashanti Region was computed as $1000/8090 \times 237$, and this gave 29.

In the final stage of the sampling process, the lottery method of simple random sampling was used to select the non-managerial respondents. In this method, each non-managerial employee was numbered. The numbers were written on different pieces of paper that were then folded and mixed together in a small box. The sample members were drawn randomly from the box.

Table 3-Distribution of Non-Managerial Staff by Size of Firm

Firm Size	Ashanti		Western		Total	
	No	Percent	No	Percent	No	Percent
Small-Scale	19	16.2	5	4.1	24	10.1
Medium-Scale	25	21.4	32	26.7	57	24.1
Large-Scale	73	62.4	83	69.2	156	65.8
Total	117	100.0	120	100.0	237	100.0

The researcher included all the 26 human resource professionals and 104 line managers in the overall sample, as the size of these populations was considered to be small. Thus, the total sample size for the study was 367.

Sources of Data

The study relied on both primary and secondary data sources for all data needs. The primary data were collected from HRD professionals, line managers, and non-managerial employees, using an in-depth interview guide, survey questionnaire and interview schedule. According to Leedy and Ormrod (2010),

the primary data is the data closest to the truth, and is often the most valid, the most illuminating, and the most truth-manifesting. In addition to the primary data collection, secondary data were derived from textbooks, published and unpublished journal articles, magazines, other PhD theses, government publications, the internet search and official documents from the Ghana Forestry Commission, Ghana Statistical Service, Ghana Timber Millers Association, Timber Industry Development Division and the Forestry Research Institute.

Data Collection Methods

There are two types of data collecting methods: the primary data collection methods and the secondary data collection methods. The primary data collection methods include the Observation, Interview/Questionnaire (Survey data collection method), Case study, Projective techniques and Sociometry (Punch, 2005). The secondary data collection methods include publications of Central, State and Local governments, publications of international and foreign organisations, journals, magazines and books, as well as public records, statistics and historical documents (Baskerville & Myers, 2009).

The survey data collection method was adopted in this study. The researcher used standardised questionnaires or interviews to collect data about the preferences, thoughts, and behaviours of respondents in the study (Creswell, 2003; Yin, 2003). The survey method was adopted because it is most appropriate for descriptive, exploratory, or explanatory research. Again, the method is best suited for studies that have individuals, groups and organisations as unit of

analysis (Yin, 2003). The survey method of data collection has two major components – interviewing and questionnaire administration (Babbie, 2007).

Interviews typically are much more like conversations than formal events with predetermined response categories (Babbie, 2007). The researcher explores a few general topics to help uncover the participant's views but otherwise respects how the participant frames and structures the responses (Punch, 2005). This method, in fact, is based on an assumption fundamental to qualitative research: The participant's perspective on the phenomenon of interest should unfold as the participant views it (the emic perspective), not as the researcher views it (the etic perspective). For qualitative researchers, four methods of data gathering are used: (a) participating in the setting, (b) observing directly, (c) interviewing in depth, and (d) analysing documents and material culture (Babbie, 2007).

Questionnaire administration is a very popular form of data collection, especially when gathering information from large groups, where standardisation is important (Creswell, 2003). The questions in questionnaire administration can be constructed in many ways, but they always consist of two components: questions and responses. While sometimes evaluators choose to keep responses "open ended," i.e., allow respondents to answer in a free flowing narrative form; this study adopted the "close-ended" approach in which respondents were asked to select from a range of predetermined answers (Baskerville & Myers, 2009; Babbie, 2007).

Most questionnaire surveys tend to be self-administered mail surveys, where the same questionnaire is mailed to a large number of people, and willing

respondents can complete the survey at their convenience and return it in postage-prepaid envelopes (Baskerville & Myers, 2009). Mail surveys are advantageous in that they are unobtrusive, and they are inexpensive to administer, since bulk postage is cheap in most countries (Punch, 2005). However, response rates from mail surveys tend to be quite low since most people tend to ignore survey requests. There may also be long delays (several months) in respondents' completing and returning the survey (or they may simply lose it). Hence, the researcher must continuously monitor responses as they are being returned, track and send reminders to non-respondents (Babbie, 2007).

A second type of survey is group-administered questionnaire. A sample of respondents is brought together at a common place and time, and each respondent is asked to complete the survey questionnaire while in that room. Respondents enter their responses independently without interacting with each other. A more recent type of questionnaire survey is an online or web survey (Yin, 2003). These surveys are administered over the Internet using interactive forms. Respondents may receive an electronic mail request for participation in the survey with a link to an online website where the survey may be completed. Alternatively, the survey may be embedded into an e-mail, and can be completed and returned via e-mail. These surveys are very inexpensive to administer, results are instantly recorded in an online database, and the survey can be easily modified if needed (Babbie, 2007; Creswell, 2003)..

Data Collection Instruments

Three data collection instruments were used, namely: an in-depth interview guide, a survey questionnaire, and an interview schedule. Because HRD professionals are the architects of HRD programmes and activities in all well-run organisations, and because the central issues in this study revolved around the competency and professionalism of HRD professionals, it was deemed necessary to use the interview guide for collecting in-depth information from all HRD professionals in the selected firms. In other words, HRD professionals were the key respondents in this study.

The interview guide was divided into four sections: Section A consisted of questions on demographic and socio-economic variables, such as sex, highest qualification, length of service and the rank or position held in the company; Section B consisted of six questions relating to HRD practice in the sawmill industry; Section C consisted of 11 questions, and were meant to collect data on the institutional arrangements of top management for ensuring the integration of social capital in HRD practice of firms in the sawmill industry in Ghana; and the final section consisted of three questions which were meant to solicit information on the contribution of social capital to HRD practice of firms in the industry.

The questions in the interview guide were meant to help the researcher to: explore HRD practices in the sawmill industry in Ghana; assess the institutional arrangements of top management for promoting social capital into the HRD practice; and determine the contribution of social capital in relation to information flow, resource exchange and support among employees in the industry.

The 104 line managers of the selected firms were made to fill a self-administered survey questionnaire. The survey questionnaire consisted of two sections. The first section consisted of background questions on demographic and socioeconomic characteristics, including sex, years of work experience, and academic qualification. The second section consisted of 19 items. The first 11 items were meant to assess the institutional arrangements of top management for promoting social capital in HRD practice in the sawmill industry. The rest were meant to solicit information on the contribution of social capital in relation to information flow, resource exchange and support among employees in the sawmill industry in Ghana. A 4-point Likert-scale technique was used to show respondents' level of agreement to the statements.

The use of the survey questionnaire for the line managers was considered appropriate because corporate managers carry enormous responsibilities in leading and managing their departments, and have hectic schedules. According to Zikmund (2003), questionnaires are a simple, yet effective data collection tool in social science research. They are cost-effective and they reduce distortions in data. The anonymous nature of questionnaires allows respondents to express their inner beliefs, attitudes and perceptions freely. As noted by Opie (2004), the questionnaire is relatively economical; respondents in distant locations can be reached; the questions are standardised; anonymity can be assured; and questions can be written for specific purposes only.

An interview schedule was used to solicit information from the 237 non-managerial employees. The same set of questions, as in the survey questionnaire,

was used for the interview schedule. This method of data collection is very much like the collection of data through questionnaire, with the only difference lying in the fact that schedules are filled in by the enumerators who are specially appointed for the purpose (Cohen, Manion, & Morrison, 2007).

Pre-test of Survey Instruments

To ensure that the instruments had the capacity to measure what they were intended to (validity), and to meet the ideal situation of producing the same results under the same or similar conditions over and over again (reliability), the survey questionnaire and interview schedule were pre-tested, using 20 frontline employees and 10 line managers respectively.

The interview guide was pre-tested, using the two HRD professionals of two sawmill firms in the Brong Ahafo Region where the pre-testing of the survey questionnaire and interview schedule was conducted. The two companies were Asuobomosadu Timbers and Sawmilling Limited (ABTS) and the Oti Yeboah Complex Limited (OYCL). The pre-testing was conducted during the period November 25, 2014 - December 12, 2014.

Following the pretest of the data collection instruments, it was observed that the management of people in the industry was entrusted in either the owners or their relatives who had little or no knowledge in HRD practices. Thus, in order to obtain relevant information for the analysis, the profile of HRD professionals in the selected firms was solicited. Out of the 26 firms selected for the study, only nine of them had HRD professionals with either the Bachelors or the Master's

Degree in human resource management. Thus, the selection of the interviewees was purposive and directed first at those respondents who were assumed to have an in-depth knowledge in HRD practice. These were assumed to be those having a strong academic qualification in human resource management and had spent at least five or more years in the industry as full-time, in-house HRD professionals.

The author observed from the pretest that, while all three categories of sawmill firms were, in general, characterised by a similar approach to the management of human resources, there were some differences in the manner in which certain HRD practices were implemented. Consequently, for each firm type, three HRD professionals were interviewed; two from each firm type in the Ashanti Region and one from each firm type in the Western Region.

The items for both the survey questionnaire and interview schedule were grouped under four themes. Each theme produced a high positive cronbach alpha as follows:

- (a) Promoting social capital in the sawmill industry (0.889),
- (b) Flow of information among members in the company (0.919),
- (c) Resource exchange and combination among members (0.841), and
- (d) Support among members (0.726).

According to Hair, Black, Babin and Anderson (2010), cronbach alpha should be greater than 0.7 in order to deem the factor or survey adequate and significant. Thus, following the pre-test, and because both the factor loading and cronbach alpha were significant, it was expected that the instruments and sample size of this study would produce a statistically significant results. A slight

modification was, however, made to the items for measuring social capital in the sawmill industry.

With regard to the interview guide, it was discovered after the pre-testing that both the field assistants and interviewees had problems with some of the interview items. These items were modified. Consequently, the pre-test was repeated to make sure that the ambiguities were removed. The time allotted to the interview was modified as it was found to be too long.

Fieldwork

On 3rd February, 2015, advance notification letters were sent electronically to inform potential respondents about the research and its purposes. The letter stated the name of the researcher, the research topic, the length of the survey, confidentiality and deadline for response to the survey instruments. The actual data collection began on 10th March, 2015 and lasted for four months, ending on 12th July, 2015.

The survey questionnaire for the line managers was self-administered. The drop-off and pick-up technique was used in the administration of the questionnaire. This involved visits and distribution of questionnaires to randomly selected full-time line managers of the selected sawmill firms. Participants were given two weeks to complete the survey. After 10 days, a reminder was sent by way of text messages to all participants. The researcher faced three main challenges in the administration of the survey questionnaire: First, some respondents refused to participate in the interview; second, some collected the

questionnaire but failed to return it; and still others picked the questionnaire but filled only some portions of it. Out of the 104 questionnaires administered to the line managers, 90 were successfully returned, representing 86.5 percent. The breakdown was as follows: 30 percent from the large-scale firms, 38 percent from the medium-scale firms and 32 percent from the small-scale firms.

The interview schedule was administered by the researcher and 10 field assistants. Each respondent was given 25 minutes to provide his or her responses. The only challenge here was the refusal of some of the respondents to participate in the interview. Out of the 237 interview schedules, 183 were successfully returned. This represented 77.2 percent. The interviews for the 26 HR professionals were conducted in their offices between 8.00 am and 3.00 pm. The researcher spent an average of 30 minutes with each interviewee. To confirm the exact content, each interview process was tape-recorded. The major challenge was the constant interruption by calls on the HRD professionals for company duties. Sometimes, the researcher had to reschedule the interview for another day, go to other interviewees and come back to complete the interview.

Data Processing and Analysis

A careful preparation of data is fundamental for conducting a genuine analysis of the data collected and for producing undistorted statistical results (Tabachnick & Fidell, 2007). Data preparation in this regard involves a series of screening and transformation procedures that aim at resolving problems commonly associated with missing data, presence of outliers, non-normality, non-

linearity, heteroscedasticity, multicollinearity and singularity which are particularly crucial when using the Statistical Product and Service Solutions (SPSS) software for data analysis (Gall, Borg & Gall, 1996). Consequently, these issues were taken into consideration during the data processing and analysis.

The data collected through survey questionnaire and interview schedule were analysed, using the IBM Statistical Product and Service Solutions (SPSS) (Version 18) Software. The raw data were transferred into codes after editing. Descriptive statistics, such as mean, median, mode, standard deviation and skewness, were computed and used in the analysis. As the views of respondents were based on perceptions which were basically subjective in nature, the normality of the distribution could not be guaranteed. Consequently, the Kruskal-Wallis and Mann-Whitney U tests were computed. The two non-parametric analysis of variance procedures were used to examine whether differences existed in the issues across the small, medium and large-scale sawmill firms.

The thematic analysis was used for deriving meaning from the information gathered through the interview guide. This involved a controlled analysis of texts within their context of communication, following content analysis rules and step-by-step models (Sekaran, 2005). The first step in the analysis was to read through the transcripts of each respondent in order to get an overview of the responses obtained from the nine human resource practitioners. In this way, it was easier for the researcher to identify and describe the “main analytic story line” that had been discovered in the course of the study (Punch, 2005).

The analysis involved three stages: the free line-by-line coding of ideas from the data collected; the organisation of these free codes into related areas to form descriptive themes; and the development of analytical themes (Babbie, 2007). The interpretation was done by comparing the issues as they occurred in the Ashanti and Western Regions. The findings were supplemented with some quotations from the HR professionals who were interviewed. A replacement name for each respondent quoted was provided alongside the quotes.

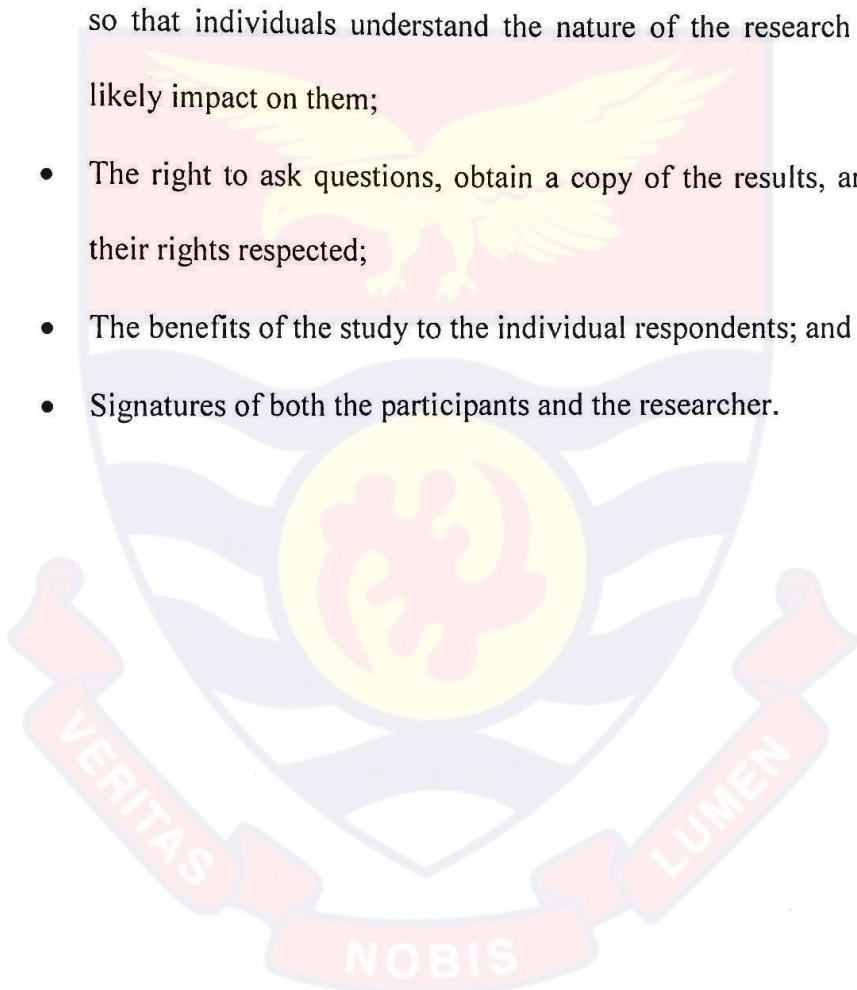
The study used three main units of analysis: the individual, the group, and the organisation. The researcher collected data from individual employees of firms in the sawmill industry and considered the response of each respondent as an individual data source. Furthermore, as employee status differed from one employee to the other in each firm, the individual data were aggregated into groups of HRD professionals, line managers and non-managerial employees, and each of these groupings was treated as one unit. Finally, as data from individuals and groups represented HRD practice in each of the firms chosen for the study, each firm was considered a separate unit.

Ethical Considerations

The researcher anticipated a number of ethical issues that might arise during the data collection. As a result, specific approval was obtained from the Ghana Timber Millers Organisation, and the directors of each of the sawmill firms selected for the study. In order to ensure that the rights of respondents were

respected and protected, the researcher adopted an informed consent form from Creswell (2003) with the following content:

- The right to participate voluntarily and the right to withdraw at any time, so that the individual is not being coerced into participation;
- The inclusion of the main purpose of the study in the instruments so that individuals understand the nature of the research and its likely impact on them;
- The right to ask questions, obtain a copy of the results, and have their rights respected;
- The benefits of the study to the individual respondents; and
- Signatures of both the participants and the researcher.



CHAPTER SIX

THE SAWMILL INDUSTRY IN GHANA

Introduction

This chapter presents an overview of the sawmill industry in Ghana. The overview begins with a description of the sawmill industry, and ends with chainsaw milling in Ghana. The main topics treated include: Nature of the Ghanaian sawmill industry; the marketing and competitive position of the Ghanaian sawmill industry; the contribution of the industry to the economic development of Ghana; government interventions in the industry and regulatory framework of the industry. Others include: the voluntary partnership agreement and timber legality in Ghana; the Ghana community forest committee; the Wood Industries Training Centre; Boosting the resource base of the sawmill industry; and chainsaw operation in Ghana.

Nature of the Ghanaian Sawmill Industry

The last three decades have witnessed an increased attention of Ghanaians to the challenges faced by the sawmill industry in Ghana. The greatest problem facing the industry is inadequate and inefficient machinery, followed by the erosion of the timber which is the input base of the industry (Paulus, 2009).

The industry also suffers from inadequate supply of technical manpower, resulting in very low conversion rate of 36 percent, although the best firms, such as the John Bitar & Co. Ltd and the Ayum Forest Products Ltd, have been achieving recovery rates of 70 percent or more. Most of the sawmill firms are not

equipped for downstream processing, and firms in the informal sector lack capital and technical capacity, and have limited access to long-term finance. Analysts have predicted that, if this trend is not reversed, the sawmill industry would collapse within 20 years (Sutton & Kpentey, 2012).

The sawmill industry is one type of formal forest industry in Ghana. A formal forest industry is one whose economic transactions are captured within the boundaries of state and formal economic structures, and is, therefore, recognised by, and dealt directly with the Forestry Commission of Ghana (Osei-Tutu, Nketiah, Kyereh, Owusu-Ansah & Faniyan, 2010). The industry is the fourth highest foreign exchange earner in Ghana, trailing only gold, tourism and cocoa (Ghana Forestry Commission, 2009). Between 1990 and 2006, exports from the industry amounted to 12 percent of Ghana's total foreign exchange (Lebedys, 2004). The industry provides direct employment to over 100,000 people and indirect employment to over 2.5 million Ghanaians (Lebedys, 2004).

The sawmill industry can roughly be classified into three categories: The export-focussed companies; the logging contractors; and the domestic market companies. The export-focussed companies are usually large-scale foreign-owned sawmills that export at least 80 percent of their timber products to foreign markets. A typical example is the John Bitar & Co. Ltd in Sekondi-Takoradi (Lebedys, 2004). The logging contractors are medium sawmills owned and run by local proprietors whose major function is to harvest the logs from the forest and sell them to the export focussed companies. An example is the Evans Timber Ltd in Kumasi. The domestic market companies are usually small Ghanaian-owned

sawmills, timber traders and furniture makers that feed the domestic market. An example is the BRM Wood Processing Co Ltd in Cape Coast (Paulus, 2009).

There are nearly 700 different tree species in Ghana's forest but only a small number are commercially viable. The timber products that are often exported by firms in the industry include plywood, kiln dried, sliced veneer, blockboards, dowels and poles. The Ghana sawmill industry is the third largest producer of timber in the world and the second largest exporter of timber products in Africa (Gyamfi, 2013). The sawmill industry is characterised by both upstream and downstream activities. The upstream activities involve the systematic and sustainable harvesting of natural forest and forest plantations. The downstream activities cover primary, secondary and tertiary operations, ranging from the processing of logs into semi-finished and finished timber products.

The decision to focus on the sawmill industry arose from consideration of its current state; most processing mills are unable to meet technical and marketing challenges, and associated business practices. This has resulted in an almost total collapse of the industry that used to be the fourth largest provider of foreign exchange after gold, tourism and cocoa in Ghana (Owusu, Appiah, Damnyag, & Blay 2011). As at January 2014, there were only 35 registered sawmill firms in Ghana (Ghana Timber Millers Organisation, 2014). Out of this number, as many as 26 were located in the Ashanti (17) and Western (9) Regions.

Currently, there are about 75 sawmilling firms in Ghana, 17 of which are involved in the production and export of sliced and rotary veneer (Ghana Timber Millers Organisation, 2014). Over 40 sawmill firms produce mouldings, profiles,

and machined wood, with about six of these specialising in flooring products and doors. Only 10 sawmill firms are involved in plywood processing. The downstream segment of the industry is dominated by small local enterprises that lack the capacity to produce export-grade lumber or achieve the large volumes required to serve international markets (Sutton & Kpentey, 2012).

Annual gross wood production totals 1.2 million cubic metres of logs. In the early 1990s, about 700,000 cubic metres of this supported export products, while the remaining 500,000 cubic metres fed the domestic market. In spite of the timber deficit on the local market, more than 75,00m³ of teak logs were exported in 2007 (Oteng-Amoakoh et al, 2008). Today, the export of logs has ceased as the industry is increasingly adding value to their exports by getting more and more logs processed before shipment. Consequently, importers of Ghana timber are now buying lumber products in the form of furniture components.

Table 4 gives an overview of sawmills and bush mills in Ghana. The Table indicates that the sawmill firms in Ghana are concentrated in Ashanti, Western, and Eastern Regions, while the bush mills are mostly found in Ashanti, Brong Ahafo and Western Regions. Among the many challenges facing the industry, inadequate and unsustainable raw materials supply, obsolete processing technology, distorted markets, inadequate infrastructure and logistics at the Forestry Commission, weak trade associations, inadequate funding of research and illegal chainsaw harvesting have been identified by Oteng-Amoakoh et al (2008). Following these challenges, strategic development interventions are

required to reverse the direction of the industry in order to promote efficiency and sustainability in the industry.

Table 4-Distribution of Sawmills in Ghana

Region	No. of sawmills	No. of bush mills
Ashanti	33	4
Western	10	2
Eastern	5	1
Brong Ahafo	4	2
Central	1	1
Greater Accra	1	-
Total	54	10

Source: Ghana Timber Millers Organisation (2014).

Marketing and Competitive Position of the Ghanaian Sawmill Industry

As well as meeting the wood needs of Ghanaians, the sawmill exports most of their wood products to Europe, Asia and some parts of Africa. The large companies, such as John Bitar, Naja David, Samartex and Mondial that produce top-quality wood products, export a significant proportion of their wood products to the international markets (Sutton & Kpentey, 2012). The main exports are lumber (air dried), curls veneer, sliced veneer and rotary veneer. Most of the small and medium-scale firms, however, feed the domestic market.

The main destinations of Ghana timber products on the international market include Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Netherland, Portugal, Spain, UK, Finland, US, Sweden, Switzerland, Malaysia, South Korea and Russia. Ghana also exports lumber products to some countries in

Africa, including Burkina Faso, Nigeria, Senegal, Egypt, Libya, Mali, Morocco, Niger, Togo and Tunisia (Bonsi, Hammett & Ametsitsi, 2011). Western Europe used to be the largest importer of Ghana's wood products by value and volume for several years until 2008 when the global financial and energy crises between 2008 and 2010 caused a significant decline in the demand for timber and timber products from Ghana. The major importers were Spain, Italy, The Netherlands, France, Belgium, Germany and the UK (Bonsi, Hammett & Ametsitsi, 2011).

Between 2009 and 2010, ECOWAS countries from Africa dominated Ghana's timber export market (Bonsi, Hammett & Ametsitsi, 2011). Exports in 2009 amounted to US\$169 million in value and 426, 221 cubic metres in volume. In 2010, the export of timber products increased to US\$181 million in value with a corresponding volume of 426, 220 cubic metres. Ghana's emerging markets in Asia and Far East, namely, India, Malaysia, China and Taiwan, also recorded 14 percent contribution to the total export earning of Ghana in 2011.

Ghana has been successful in creating a niche for itself on the international market in terms of semi-finished wood and wood products that serve as input to their foreign timber trading partners (Sutton & Kpentey, 2012). Ghana competes with many other tropical timber producing countries that are ahead of Ghana in terms of specialised skills required for value-added processing in the downstream. Consequently, the sawmill industry has not been competitive in the downstream finished products market (Oteng-Amoakoh et al, 2008; Sutton & Kpentey, 2012). However, the industry can be competitive if measures are taken by all

stakeholders to improve on the processes and procedures in the industry, and by taking a more proactive approach in resource utilisation and market research.

Contribution of Sawmill Industry to the Economic Development of Ghana

The contribution of the sawmill industry to the economic development of Ghana may be attributed to a number factors, including employment, foreign exchange earnings, construction of roads, energy production, and wood for building and general construction. The sawmill industry offers direct employment to over 100,000 people undertaking various timber industry operations, and indirect employment to over 2.5 million Ghanaians (Bonsi, Hammett & Ametsitsi, 2011; Boon, Ahenkan & Baduon, 2009). However, over 5,000 Ghanaians lost their jobs in the industry due to the global financial and energy crisis between 2008 and 2010 (Sutton & Kpentey, 2012).

The foreign exchange earned in Ghana from the export of wood products between 2000 and 2009 is presented in Table 5. The table shows that the amount of foreign exchange earned in Ghana from the export of wood products between 2000 and 2009 is inconsistent. For instance, from 2000 to 2003, when the amount increased for a particular year, it decreased in the following year. From 2003, however, the amount of foreign exchange earned in Ghana from the export of wood products increased consistently from 174 in 2003 to 212 in 2004 and then 227 in 2005. Again, the amount decreased to 207 in 2006, then rose to 247 in 2007. The highest amount in the period between 2003 and 2009 was earned in 2008. This was 317 million US\$. In 2009, only 180 million US\$ was earned.

Table 5-*Foreign Exchange Earned by Firms from Wood Export in Ghana*

Year	Value (Millions of US\$)
2000	175
2001	169
2002	183
2003	174
2004	212
2005	227
2006	207
2007	249
2008	317
2009	180

Source: Ghana Forestry Commission (2011)

Timber exports from the sawmill industry ranks fourth in foreign exchange earnings behind gold, tourism and cocoa (Birikorang, Okai, Asenso-Okyere, Afrine & Robinson, 2001). According to the Timber Export and Development Board (TIDD/FORIG, 2009), foreign exchange earnings from timber exports were almost US\$ 135 million in 1990, providing an estimated 13 percent of total foreign exchange earnings to support government developmental programmes, as well as helping in stabilising the cedi-dollar exchange rate.

As part of its logging activities, the sawmill industry also contributes immeasurably to the construction of roads (about 240 km/year), which, in most cases, tend to serve as feeder-roads for transporting people and agricultural crops from the rural areas to market centres, (Osei-Tutu, Nketiah, Kyereh, Owusu-Ansah & Faniyan, 2010). In addition to road construction, the industry contributes to the development and sustainability of commercial and social activities in rural

areas, such as Samareboi, Dwinase and Mim in the Western and Brong Ahafo Regions respectively (Odoom & Vlosky, 2010; Sutton & Kpentey, 2012).

It is estimated that about 20 million cubic metres of timber are consumed annually for energy production in Ghana (TIDD/FORIG, 2009). The common practice in most houses in Ghana is to use charcoal for cooking and heating. According to the Timber Export Development Board (TIDD/FORIG, 2009), about 69 percent of all urban households in Ghana use charcoal, and the total annual consumption is about 700,000 tons, out of which 30 percent is consumed in Accra. Charcoal production in Ghana is concentrated in the transition zones between the forest and the savannah woodlands, where operators either fell trees for this purpose or use logging residues (Oduro, Marfo, Agyeman & Gyan, 2011).

One area where the industry has significantly contributed to economic development of Ghana is the provision of wood for building and general construction (TIDD/FORIG, 2009). While there seems to be a general lack of guidance in Ghana on the selection of particular timbers for this purpose, engineers, wood specifiers and end-users of timber have been holding on to the few well-known species like Odum, Afromosia, Khaya and Entandrophragma. According to Ayarkwa (1998), Ghanaians are familiar with these species and are sure of their technical suitability in terms of mechanical properties, durability characteristics, wood stability in service and woodworking characteristics, as well as their sustained availability in the required dimensions on the local market to warrant intensive utilisation in the furniture and construction industries.

The Forestry Research Institute of Ghana (FORIG) and the Timber Export Development Board (TEDB), in their collaborative research and promotional effort in 1996, studied the properties and possible end-uses of species, such as Denya, Danta, Essia, Wawabima, Esa, Ofram, Potrodom, Avodire, Ananta, Ayan, Awiemfosamina, Chenchen and Ceiba, for promotion to the local furniture and construction industries (TIDD/FORIG, 2009). The study found that high mechanical property, high or moderate durability, high to medium dimensional stability, satisfactory woodworking and attractive appearance were the most important properties required in wood for purposes, such as roof trusses, doors and window frames, and panel doors. For heavy construction purposes, such as railway sleepers, bridges, and industrial floors, the most relevant properties included high durability or amenability to treatment, high dimensional stability and high density and mechanical properties (Bonsl, Hammet & Ametsitsi, 2011).

Government Interventions in the Sawmill Industry in Ghana

In response to the ailing problems confronting the sawmill industry, several interventions have been made by the government of Ghana to salvage the industry's dwindling performance in recent times (Evans, 1992). The interventions are important because, at the current rate of exploitation and mismanagement, it is estimated that unless drastic and prudent measures are taken immediately to sustain and implore what is left, Ghana is likely to become a net importer of timber within 30 years (Ayarkwa, 2009; TIDD, 1998).

The first government intervention in the sawmill industry was the passing of the Timber Protection Ordinance (TPO) in 1913 as a prelude to the creation of forest reserves by the colonial government. However, owing to the stiff opposition from the indigenes, the colonial government was compelled to freeze the enforcement of the TPO, and this led to the closure of the Forestry Department in 1916. Three years later, the department resumed operation with the creation of forest reserves in most parts of the country, including the Bui National Park in the Banda District of Brong Ahafo Region (Odoom & Vlosky, 2010).

Until 1995, a significant number of timber logs left the shores of Ghana to the Far Eastern countries. In each year, total exportation of timber logs exceeded the then allowable cut of 1.2 million cubic metres. Log exports reduced raw material availability for domestic processors on the local market. This trend compelled the government to suspend the export of logs from Ghana in the late 1995 (Odoom & Vlosky, 2010). As the suspension of log exports was not enough, the government reduced the timber allowable cut of 1.2 million cubic metres to 1.0 million cubic metres. However, to salvage valuable timber from being destroyed, the annual allowable cut in off-reserve areas was increased from 0.5 million cubic metres to 1.5 million cubic metres in 2005 (Ayarkwa, 2009).

In an attempt to increase the value of lumber products that were exported from Ghana, the government instituted the Ghana Investment Promotion Centre in 2000. The main strategy was the use of tax incentives to attract direct foreign investment and/or encourage foreign partnership with local companies in order to boost value-adding wood processing in Ghana (Agyeman, Oduro, & Gyan, 2007).

The incentives included: tax holidays, custom import duty exemptions, location incentives, carry-over of losses, capital allowances and the establishment of the Free-zones.

In addition, quite a number of policies and strategic enactments were initiated by government and her agencies as guides for the management of forest resources in order to revamp the wood industry in Ghana (Agyeman, Oduro, & Gyan, 2007). They included: the Forest Commission Act of 1960; the Forest Improvement Fund Act of 1960; the Concessions Act of 1962; the Forest Ordinance for the Protection of Forest, including Reserves of 1972; Trees and Timber (chain saw operation) Regulation of 1983; the Administration of Land (Amendment) Degree of 1984; the Forest Products Inspection Bureau Law of 1985; the Forest Protection (Amendment) Law of 1986; the Control and Prevention of Bushfires Law of 1990; and the Trees and Timber (chain saw operation) Regulation of 1991.

A major policy review to regulate chainsaw operation was undertaken between 1996 and 1997 when the Timber Resource Management Act of 1997 (Act 547) and Timber Resource Management Regulations, 1998 (L.I 1649) prohibited chainsaw processing of lumber in Ghana. A team of Regional Timber Task Forces, comprising the Military, Police, and Staff of the Forestry Commission, was charged to enforce the acts which included, among other things the tracking down of culprits and the confiscation of lumber, equipment and vehicles used in the chainsaw operations (Owusu, 2004). According to Owusu

(2004), the cost incurred using this strategy was quite enormous, including losses of human lives.

The most recent government intervention in the industry has been the implementation of the Validation of Legal Timber Programme (VLTP) and the formalisation of the Voluntary Partnership Agreement (VPA) with EU (Ghana Forestry Commission, 2009). In an attempt to combat illegal logging and chainsaw operations in Ghana, the government endorsed the Forest Law Enforcement, Governance and Trade (FLEGT), which was charged to monitor and prevent forest crimes by encouraging and ensuring the implementation of law enforcement programmes in the forest sector (Agyeman, Agyeman & Kyere, 2004).

At the core of the Validation of Legal Timber Programme (VLTP) Action Plan was the Voluntary Partnership Agreement (VPA). By endorsing the VPA as a timber producing country, the government of Ghana demonstrated her desire and preparedness to tackle global challenges of deforestation and forest degradation by countering illegal logging and promoting sustainable forest management. It also indicates government's acceptance that areas of law enforcement that the state on its own cannot fully implement would be carried out through the use of international support (Paulus, 2009). According to Ghana Forestry Commission (2011), Ghana was the first country to sign a Voluntary Partnership Agreement (VPA) with the EU.

An important part of the VPA was the Timber Licensing Scheme that required the issue of licenses to stakeholders in Ghana. This ensured that timber

products leaving the country, especially to the EU, were from a legal source. Unlicensed consignments from producing countries will be denied access to the European markets under the scheme. In an attempt to ensure the success and sustainability of its interventions in the affairs of firms in the sawmill industry, the government of Ghana has instituted a framework for regulating their operations.

Regulatory Framework for the Ghanaian Sawmill Industry

The Ghana Forestry Commission is by law the government agency responsible for the management of all forest products, including those of the sawmill industry in Ghana. The Commission was established under the Ghana Forestry Commission Act of 1980 (Act 405) to coordinate the activities of the forestry sector institutions, namely: the Forestry Department; Department of Game and Wildlife; Forest Products Research Institute; and the Ghana Timber Marketing Board (Ghana Forestry Commission, 2011). Section 6 of the Act mandated the Commission to regulate and manage the utilisation of all forestry and wildlife resources of Ghana, and to coordinate the policies in relation to forest resources.

The Commission exercises this responsibility through collaboration with local governments, landowners, forest fringe communities, forest industry and non-governmental organisations (Paulus, 2009). While there are three main divisions of the Forestry Commission, namely: the Forest Service Division (FSD), the Timber Industry Development Division (TIDD), and the Wildlife Division, only the Timber Industry Development Division has direct functions of

protection, development, management and utilisation of timber products in Ghana (Ghana Forestry Commission, 2011).

The Timber Industry Development Division, which is a fusion of the Timber Export Development Board (TEDB) and the Forest Products Inspection Bureau (FPIB), evolved from various post-independence attempts at rationalising the utilisation of Ghana's wood timber resource (Ghana Forestry Commission, 2011). The TEDB was established primarily for export promotion and market information dissemination. The FPIB, on the other hand, was responsible for contract verification, timber and wood product inspection and approval, training of graders, certification and the issuance of timber export permits.

In a move to further strengthen the regulation of the timber industry in order to reduce the level of illegality with regard to access to forest resources, various enactments were made by the government of Ghana. The Concessions Act of 1962 (Act 124) was the first act that had direct control over the timber industry in Ghana (Oduro, Marfo, Agyeman, & Gyan, 2011). Act 124 which amended the Concessions Ordinance, divided forests and protected areas into concessions for the purpose of timber exploitation in Ghana. By vesting timber rights on all forest land in the President in trust for the landowners, the act compelled the government to implement the provisions in the act, including forest fees, timber lease and licenses (Oduro, Marfo, Agyeman, & Gyan, 2011).

In order to ensure that forest resources were used judiciously, the Concessions Act of 1962 (Act 124) was replaced by the Timber Industry (Government participation) Decree of 1972 (NRCD 139). Forest lands which

were held in trust for the local chiefs by the central government were misused and mismanaged by the local governments. Application for timber concessions were submitted to the chiefs who derived significant revenues from leasing timber rights but could not monitor or manage forest resources well (Odoom & Vlosky, 2010). Consequently, all rights over natural resources were stripped from the traditional communities and taken over by the central government in 1974 (Oduro, Marfo, Agyeman, & Gyan, 2011).

The legal reform of timber concessions continued until 1997 when the Timber Resources Management Act of 1997 (Act 547) and its accompanying Timber Resources Management Regulations of 1998 (LI 1649) were passed. Following these enactments, the Timber Utilisation Contract which became the new legal wing of Act 547, mediated between the state, holders of timber rights and landowners, giving it the greatest ability to enforce regulations on established terms and conditions, including compliance with forest management specifications, and periodic audit of contracts for non-compliance (Oduro, Marfo, Agyeman, & Gyan, 2011).

In 2002, both the Act and its accompanying regulations were amended by the Timber Resources Management (Amendment) Act of 2002 (Act 617) and the Timber Resources Management (Amendment) Regulations of 2002 (LI 1721) to exclude the granting of timber rights on land with private forest plantation, or land with any timber grown on it as well as lands owned by individuals or group of individuals. The amendment also introduced competitive bidding for timber rights in Ghana.

The Voluntary Partnership Agreement and Sawmill Legality in Ghana

The endorsement of the Voluntary Partnership Agreement (VPA) is the most significant trade policy and agreement that has affected forest and timber trade in the last decade in Ghana. Following the increasing menace of illegal logging to the environment and the national economy, the government of Ghana, in her desire to ensure sustainable forest management in the country, signed an agreement with the European Union, called the Voluntary Partnership Agreement. The VPA, which in its strictest terms tackles law enforcement, governance, and trade, has been designed using three main instruments, namely: Definition of Legality Standards (LS), Wood Tracking System for Verification, and the Institutional Regulation System (IRS) (Oduro, Marfo, Agyeman & Gyan, 2011).

The legality definition reflects the hard law regulatory discourse, showing the extent to which this regulatory discourse has entrenched itself throughout forestry history in Ghana. While the VPA maintains the force of a hard law, it relegates the responsibility to define what legal timber is in accordance with national laws, thereby granting greater flexibility uncharacteristic of top-down regulatory discourse (Oduro, Marfo, Agyeman and Gyan, 2011). It is also on record that certain requirements in the legality standards are drawn from Forestry Commission's Manual of Procedures (MoPs) for the management of forests. According to Oduro, Marfo, Agyeman and Gyan (2011), the legal status of the MoPs derives from Act 547 (L.I. 164).

Annex II of the Agreement elaborates the legality standards. Article 16 of Annex II reflects the bottom-up approaches to enforcing timber legality standards

with a call for strong stakeholder consultation and participation in its implementation. Article 18 focuses on using market incentives that favour trade in legal timber. In this regard, both public and private procurement policies are used as baits for enforcing timber legality standards (Sutton & Kpentey, 2012). Article 10, however, requires independent agencies, that do not have any conflict of interest, to monitor timber legality standards, as this provision softens the existing conservative approach where the Forestry Commissioner acts as the manager, regulator and monitor at the same time. The VPA also requires all exporting sawmills to export according to the procedures and requirements of the Legal Verification System (LVS) which is one of the most important parts of the Wood Tracking System for Verification. The legality standards significantly draw on laws as shown in Table 6.

Table 6-Laws and Regulations Defining Sawmill Legality in Ghana

Act	Year
Forest Ordinary (Cap 157)	1927
Concession Ordinary (Cap 136)	1939
Administration of Lands Act (Act 123)	1962
Factories, Offices and Shops Act (Act 238)	1970
Trees and Timber Decrees (N.R.C.D273)	1974
Economic Plants Protection Decree (A.F.R.C.D 47)	1979
Social Security Law (P.N.D.C. Law 247)	1991
Timber Resources Management Act (Act 547)	1997
Forestry Commission Act (Act 571)	1999
Internal Revenue Act (Act 592)	2000
Timber Resources Management (Amendment) Act (Act 617)	2002
Labour Act (Act 651)	2003

Source: Oduro, Marfo, Agyeman & Gyan (2011)

An important part of the LVS is the timber licensing scheme which requires that all timber products leaving Ghana, and specifically to the European Union, are covered under a license issued by the state. In this way, all unlicensed consignment would be denied access to the European market. Non-EU exports will not require this license but will be exported under similar regulatory requirements as those of the VPA. The wood tracking system was also implemented to serve as a proof of the legality and traceability of all timber traded under the VPA agreement. The Legal Verification System requires that: there is license to harvest timber; harvesting is consistent with national law relating to forestry; taxes and fees relating to forest products have been paid; and respect for other party's legal tenure rights (Paulus, 2009).

The agreement also attempted to institutionalise regulatory discourses that reflect the soft law. Included in this institutionalisation is the culture of responsible management and the need for corporate responsibility to affected societies. The Institutional Regulation System (IRS) makes explicit demands for social-safeguards to mitigate impact of forest policies and practices relating to the enforcement of timber legality standards (Bonsi, Hammett & Ametsitsi, 2011). In this regard, the agreement requires monitoring to be done by independent agencies that do not have any conflict of interest. This provision softens the previously conservative approach where the Forestry Commission acted as the manager, regulator and monitor of forest and timber products all alone. Thus, the VPA calls for a strong stakeholder consultation and collaboration in its

implementation, making it the most significant trade instrument that has institutionalised the mix of soft and hard regulatory discourses in Ghana.

The Ghana Community Forest Committee (GCFC)

The Community Forest Committee (CFC) is an innovative community institutional set-up that was established in a forest fringe community under the facilitation of the Forest Services Division to serve as a link between the wider local community and Forestry Commission of Ghana (Osei-Tutu, 2011). The CFC was established in 1994 to create the avenue for involving local communities in forest management in Ghana. The move was in line with government's attempt to enhance community empowerment and participation in the governance of forest products. According to Ingles, Musch and Qist-Hoffmann (1999), one key motivation underlying the idea of participatory forestry management is the conviction that the management of forest resources is more likely to be effective when local resource users are actively involved, and made to benefit from it.

In the past, forest management, with high emphasis on the timber value of the forest, was vested in the state. Centralised management was based on the premise that local communities were incapable of ensuring the sustainability of their forest, and that without external state intervention, management by local communities of such resources could lead to their destruction (Osei-Tutu, 2011). However, following the failure of centralised management of forest resources, as manifested in the rapid rate at which the nation's forests have disappeared over the last four decades, local community participation in forest management was

considered as an alternative or addition to a previously dominant strategy of exclusive forest management by state agencies (Osei-Tutu, 2011). Though the original idea was to collaborate with local people for off-reserve forest management, the CFCs have, in practice, been equally involved in the management of reserved forests in Ghana.

The Community Forest Committees were created to collaborate in managing the forest in areas such as the prevention of fire, illegal harvesting of timber and plantation development (Marfo, 2004). According to Marfo (2004), the creation of the CFCs was in order because the local communities owned the land and protected timber seedlings on their farms. Consequently, any contractor who requires timber utilisation right from natural forest in Ghana must, according to Act 547 enter into negotiations with the local communities who have interest in the forest area to agree upon specific social responsibilities, such as contributing to a development project or building schools for the communities.

Community Forest Committees have been established in each forest fringe community in Ghana. By 2007, the Forest Services Division of the Forestry Commission of Ghana had established Community Forest Committees in over 1000 communities in Ghana (Osei-Tutu, 2011). The CFCs have played an important role in ensuring sustainability of forest resources in Ghana (Brenya, 2005). They have helped to reduce illegal timber operation to the barest minimum through arrest, reports of culprits to the FSD or by their mere presence in the community. They also have contributed considerably to the control and

prevention of forest fires, and in forest restoration by leading community tree seedling programmes through the *taungya* system (Brenya, 2005).

Despite these achievements, the CFCs's effort have been undermined by a number of setbacks, including absence of a legal backing, failure to recompense community roles in the collaborative forest management as well as inadequate facilities and incentives (Marfo, 2009). According to Marfo (2009), the government's reluctance to the demands of the CFCs is based on her perception that forest resources are public goods which must be managed by the state for the benefit of all citizens. The CFCs are only helping the state in this direction, and cannot be given total control over the management of forest resources.

The Wood Industries Training Centre

In a study sponsored by the erstwhile Timber Export Development Board (TEDB) to investigate the human capital of Ghana's wood industries in the early 1990s, it was found that the sawmill industry was severely hit by non-availability of professionals, skilled technicians and artisans (TIDD, 1998). Most positions demanding skilled labour were occupied and performed by unskilled labour trained in apprenticeship or on-the-job, a situation which contributed to low efficiency, high waste, low income, less employment, poor quality of product turn-out and minimum returns on investment (Owusu, Ayarkwa & Frimpong-Mensah, 2012; Appiah-Kubi, Kankam & Adom-Asamoah, 2012).

Following this dismal situation, the Timber Export Development Board (TEDB), in collaboration with the Forest Products Inspection Bureau, established

the Wood Industries Training Centre (WITC) at Akyawkrom, near Ejisu in the Ashanti Region in March, 1995 to address the human capital deficiency (Baiden, Badu, & Menz, 2005). The World Bank, the International Development Agency, the Overseas Development Association (now the Department for International Development) and the Danish International Development Agency (DANIDA), financially and logistically assisted the government of Ghana to establish the centre (Ghana Forestry Commission, 2011).

The primary goal for establishing the centre was to develop and upgrade professional knowledge and skills of personnel in the sawmill industry through high quality technical and managerial training courses, including extension and consultancy services, which were considered critical in ensuring efficient and sustainable utilisation of timber resources in Ghana and other neighbouring countries in sub-Saharan Africa (Ghana Forestry Commission, 2011). By its strategic location at the central part of Ghana, WITC is accessible to all companies and furniture-making firms in Ghana.

Boosting the Resource Base of the Sawmill Industry in Ghana

The Ghana timber industry has experienced drastic changes in terms of raw material supply and availability. This follows the excessive exploitation, illegal chainsaw operations and the total neglect of the established harvesting procedures by logging companies and contractors which have led to a reduction in the raw material base, and an increase in the cost of sawmilling operations in the industry (Owusu, Ayarkwa & Frimpong-Mensah, 2012). Efforts to improve the

supply of raw material in the industry compelled the government to adopt a strategy of promoting the utilisation and marketing of lesser-used timber species and the development of the bamboo industry as substitutes for boosting the raw material base of the industry.

The dependence of the Ghanaian timber industry on a few of over 300 known species has led to over-exploitation of the more traditional and commercially known species such as the *Pterygota macrocarpa* (Koto), *Milicia excelsa* (Odum), *Khaya ivorensis* (Mahogany), *Triplochiton scleroxylon* (Wawa), *Terminalia ivorensis* (Emire), *Aningeria altissima* (Asanfina) and *Nesogordonia papaverifera* (Danta) (Owusu, Ayarkwa & Frimpong-Mensah, 2012; Appiah-Kubi, Kankam & Adom-Asamoah, 2012).

Most of the 32 well-known traditional species are now very scarce. Fifteen of them have already been rated as scarlet star species (i.e species which are seriously over-exploited and some of them almost to the point of commercial extinction) (Ayarkwa, 1998). In order to reduce the pressure on the few primary species and to keep the timber industry in business, the government of Ghana embarked on the promotion of lesser-used species.

The introduction of lesser-used species was motivated by three factors, namely; a vast number of lesser-used species abound in the Ghanaian forest; the lesser-used species show promising market potential; and the lesser-used species will expand the resource base of the industry and make a lot more raw material available to logging companies (Owusu, Ayarkwa & Frimpong-Mensah, 2012). Another factor that contributes to the promotion of lesser-used species in Ghana is

the capacity of firms and carpentry workshops to process them (Ayarkwa, 2009). For several reasons, the use of timber in construction in recent times is dependent on lesser-used timber species rather than the well-known commercially accepted species (Appiah-Kubi, Adom-Asamoah, Frimpong-Mensah & Tekpetey, 2011).

The term lesser-used species does not connote inferiority as many of them are comparable to the well-known commercially viable species. The most common of these lesser-used species include, but not limited to: *Strombosia glaucescens* (Afena), *Cylicodiscus gabunensis* (Denya), *Peterslanthus macrocarpus* (Essia), *Amphimas pterocarpoides* (Yaya), *Sterculis oblonga* (Ohaa), *Celtis mildbraedii* (Esa), *Rhodognaphalon brevicuspe* (Onyina-koben), *Albizia ferruginea* (Awiemfosamina), *Blighia sapida* (Akye), *Canarium schweinfurthii* (Bediwonua), *Sterculia rhinopetala* (Wawabima), *Cola gigantean* (Watapuo), *Antiaris toxicaria* (Kyenkyen) and *Amphimas pterocarpoides* (Lati) (Owusu, Ayarkwa & Frimpong-Mensah, 2012).

Another opportunity for boosting the resource base of the Ghanaian sawmill industry rests on the availability of bamboo on community lands, farmlands, fallow-fields and forest reserves in Ghana (Obiri & Oteng-Amoako, 2007). The Ghanaian climate supports the cultivation of bamboo, especially the *Vulgaris* species, which is most commonly found in the country.

The potential role of bamboo as an alternative source of wood and sustainable enterprise has been underscored in Ghana. In 2002, the government of Ghana introduced the Bamboo and Rattan Development Programme (BARADEP) to find sustainable ways of developing the bamboo sector in order to promote the

utilisation of bamboo and rattan resources as alternatives to timber wood in Ghana (Ghana Forestry Commission, 2011).

Most bamboo in Ghana naturally grows in the wild. The highest stock of natural bamboo reserves are found in the Western Region which holds over 60 percent of Ghana's natural bamboo. In Ghana, bamboo poles are used to suspend television aerials for better reception. In the urban areas, bamboo culms are used for scaffolding, and in the rural settings, they are used particularly as frames for mud houses, props, rafters, roofing materials and for binding thatch in roofing houses (Agyeman, Agyeman & Kyere, 2004).

Bamboo has been used globally for a variety of purposes, including environmental restoration and in the production of handicrafts, artefacts and furniture. Bamboo ply, laminated boards, flooring, roofing sheets, props and many others, have been key wood substitutes of bamboo in the construction industry (Obiri & Oteng-Amoako, 2007).

Commercial harvesting of bamboo is done all year round in the deciduous, moist, and wet evergreen forest zones covering the Ashanti, Eastern and Western Regions. Whereas the large-scale dealers in bamboo have been able to develop a number of complex tertiary products, including bamboo ply, ceiling panels, and flooring as well as home and office accessories, the dominant small-scale producers only harvest bamboo for furniture (Appiah-Kubi, Kankam & Adom-Asamoah, 2012). Indeed, bamboo resources can provide alternative viable livelihood when properly harnessed. The global annual market potential for bamboo is estimated at \$2 billion (Marfo, 2009).

Chainsaw Milling in Ghana

Lumber production and trade is not limited to sawmill firms in Ghana. A large proportion of the domestic lumber market is occupied by chainsaw operators who use illegal logging techniques to fell and mill trees from the Ghanaian forest (Marfo, 2009). The conversion of logs into lumber using chainsaw machines (Chainsaw milling) is considered as the main factor militating against the development of the sawmill industry and forest sector management in most tropical countries (Obiri & Oteng-Amoako, 2007).

Chainsaw milling was introduced in West Africa in the late 1970s. In Ghana, however, commercial chainsaw milling became widespread in the early 1980s (Marfo, 2009). It is generally reported that the commercial production of lumber using chainsaws started in the Eastern Region, precisely in Akim Oda, Kade and Koforidua (Obiri & Oteng-Amoako, 2007). Until 1998, chainsaw milling was a legal activity in Ghana. However, as their operations increased in the commercial sector, the government of Ghana was compelled to regulate the enterprise through the promulgation of the Trees and Timber (chainsaw operations) Regulation of 1991 (L.I.1518) which allowed District Assemblies to register chainsaw machines, and, in conjunction with the District Forestry Office, gave permits for the felling and milling of trees (Marfo, 2009).

Consequently, chainsaw milling became a popular business among the rural poor in Ghana as the start-up capital, logistics and machinery input was manageable. As the business continued, the operators and other actors engaged in corrupt practices with public officials and local communities that led to negative

economic and environmental consequences for the country (Marfo, 2009; Obiri & Oteng-Amoako, 2007).

Chainsaw milling and sale of chainsaw lumber became illegal in Ghana in 1997, following the indiscriminate felling of trees by untrained fellers that occurred as a consequence of the misapplication of the Trees and Timber Regulation of 1991 (L.I.1518). The corrupt practices and indiscriminate felling of trees in the forest sector raised public concern in reference to forest resource depletion and environmental degradation (Otoo, 2004; Owusu, 2004; Obiri & Oteng-Amoako, 2007).

Eventually, government was compelled to impose a ban on chainsaw lumber production and trade in 1997 as provided under Act 547 (1997) and Legislative Instrument 1649 (1998). These laws criminalised the use of a chainsaw for lumber production, as well as the sale or use of chainsaw lumber in Ghana. In spite of the ban, there is a widespread chainsaw milling and sale of chainsaw lumber in Ghana.

The persistence of chainsaw milling has resulted in low recovery, as a consequence of the wasteful use of forest resources in Ghana (Otoo, 2004). Furthermore, there is loss of timber revenue to the state and land owners because most trees are felled illegally. Again, the use of inappropriate techniques has been considered as one of the main issues threatening the development of the forest sector and sustainable forest management in Ghana.

Despite these drawbacks, chainsaw milling has many attributes that present great potential to contribute to development in Ghana. From the way

operations are carried out, chainsaw milling is labour intensive and, therefore, creates more job opportunities for the rural people. It also contributes to lumber production for the domestic market (Marfo, 2004; 2009; Otoo, 2004). Table 7 presents the summary statistics on timber production and trade by chainsaw operators in Ghana in 2009.

Table 7-Summary Statistics of Chainsaw Milling in Ghana (2009)

Total annual gross revenue from CSM	GHC 279 million
Annual gross revenue retained by CSM operators	GHC 52 million
Total annual profit from CSM	GHC 37 million
Net profit from CSM	GHC 66.6 million
Volume of trees annually harvested by CSM	2.5 (2.2 – 2.9) million m ³
Number of trees harvested by CSM operators	842,000 (745,000- 970,000)
Conversion efficiency of CSM	30.3%
Number of species processed by CSM	72
Dominant species supplied to the market by	Mahogany, Wawa, Ofram
Volume of CSM lumber sold on the market	558, 054 m ³
Volume of CSM lumber consumed in Ghana	496, 815 m ³
Proportion of CSM lumber on the domestic Mkt	84%
Number of people directly engaged by CSM	97, 000
Annual potential stumpage revenue lost	GHC 25 million
Estimated annual value of informal payments	GHC 33.5 million

Source: Marfo (2009)

CHAPTER SEVEN

HUMAN RESOURCE DEVELOPMENT PRACTICES IN THE SAWMILL INDUSTRY IN GHANA

Introduction

This chapter presents the data gathered from the nine HR professionals who participated in the study. The chapter is divided into seven sections. First, the socio-demographic characteristics of the subjects are presented. The remaining sections are based on the six core issues/themes in HRD practice: recruitment and selection practices; attraction and retention practices; training and development practices; appraisal strategies and practices; reward systems and practices; and health and safety practices.

Demographic Characteristics of HR Professionals

This section describes the socio-demographic characteristics of the nine HR professionals who participated in the interview. Each interviewee provided complete demographic characteristics of himself or herself, including sex, rank/position, *highest* academic qualification, years of work experience in human resource-related jobs, name of company, type of sawmill firm, and the region where the firm was located.

Regarding sex, eight (88.90%) of the HR professionals were males, with only one female. Perhaps, this is an indication of the usual male dominance in the Ghanaian industry. All the nine HR professionals indicated that they studied human resource management. Four (44.40%) of them had the Master of

Philosophy Degree, two (22.20%) held the Master of Commerce Degree, and three (33.30%) had the Bachelor of Science Degree in human resource management.

With respect to rank, the majority (66.70%) of the HR professionals had been promoted to the Senior Administrative Assistant positions, while two others (22.20%) were Principal Administrative Assistants. Only one HR professional was a Junior Administrative Assistant. This probably suggests that there is a relationship between employee qualification and HRD position held in the sawmill industry in Ghana: that people may qualify for an HR job only when they, at least, have a first degree in human resource management.

The majority (77.80%) of the HRD professionals had more than 10 years of work experience in the HR Department and two had only five to eight years of experience. Six (66.70%) of the HR professionals were in the Ashanti Region. Out of this number, two companies (Naja David Veneer & Plywood Ltd and Logs & Lumber Ltd) were large-scale firms, two other firms (Bibiani Logging & Lumber Co Ltd and Kumi & Company Ltd) were operating as medium-scale sawmill firms, while the rest (Evans Timber Ltd and Fabi Timbers Ltd) were small-scale firms. The three other HRD professionals were in the Western Region. Their companies were Samartex Timber & Plywood Ltd (large-scale), Ghana Prime-wood Products Ltd (medium-scale), and Mondial Veneer (Gh) Ltd (small-scale).

The demographic characteristics of the HRD professionals were important because they indicated the level of maturity, objectivity, authority and

independence of the respondents in providing actionable and meaningful information on which research reports and decisions could be made.

Recruitment and Selection Practices

An important theme of interest to the researcher was the recruitment and selection practices of firms in the sawmill industry in Ghana. The intention was to assess the suitability of applicants for job vacancies in the industry, and to evaluate the recruitment and selection procedures used by HRD professionals in the sawmill industry. Consequently, the interview questions on this theme were designed to ascertain whether there was a deliberate and structured effort by management to recruit ideal candidates for job vacancies in the industry. The ultimate aim was to establish the contribution of recruitment and selection practices to the growth, performance, and survival of firms in the industry.

The first part of the interview focused on the recruitment practices of firms in the industry. There was a semblance of recruitment practices in the large-scale firms. One interviewee made the following statement:

In this firm, an approval is sought from the Chief Executive Officer before recruitment. The HR department conducts a job analysis of all jobs in the firm and makes a recommendation to the Chief Executive Officer for his approval. When approval is given, the next stage is the 'discovery' of potential people to fill the identified vacancy (Interviewee 9).

This response indicates that formal recruitment procedures are followed when recruiting candidates for job positions in the large-scale firms in the industry. In this way, the HR professionals of these firms can recruit only those people who can be led, managed and developed, as maintained by Misnan and Mohammed (2007). The response also indicates that management is aware that effective recruitment decisions can enhance the firm's chances of finding the best candidates for any position, a result that supports the conclusions drawn by Bartunek and Moch (1987).

According to another respondent, available vacancies are first posted on staff notice-boards, newsletters or the corporate intranet systems to ensure that priority is given to existing employees. He noted that, at least, senior management positions are reserved for existing employees in the firm:

Where suitable candidates can be located in the organisation, there is no need to go outside. In fact, for most senior management positions in this firm, the usual practice has been to recruit or promote a candidate from within. For some middle level positions, however, existing employees are given an equal opportunity to compete with external applicants. Here, the methods used often vary but may include advertisements, the use of recruitment agencies and consultants, and educational establishments (Interviewee 4).

This response indicates that HR professionals of large-scale firms in the sawmill industry prefer internal recruitment to recruiting candidates from outside. The

practice is good as it allows the firm to save cost in areas such as advertising and induction training. The response corroborates the findings of Taylor (2008) that when recruiting from within the organisation, employers can advertise job vacancies at no extra cost, using staff notice-boards and other available systems.

Surprisingly, at least five out of the six interviewees from the small and medium-scale firms expressed the view that the HRD department played an insignificant role in employee recruitment exercises in their respective firms. The administrative and employee advocacy roles of the HRD manager were the sole responsibility of the Chief Executive Officer. One of them had this to say:

In this company, the Chief Executive Officer's office is synonymous with the HR Head position. A candidate seeking for employment directly applies to the Chief Executive Officer. The officer invites him or her for an interview. It is only when the candidate is selected that he or she is handed over to the HR department for record keeping and others. And mostly, these are family members or friends and their relatives. Even where senior positions are involved, the HR department would only advertise the position and nominate the candidates for an onward interviewing and selection by the Chief Executive Officer (Interviewee 5).

Given the preceding response, it is clear that the HR departments in the small and medium-scale firms of the sawmill industry have not been given the requisite

authority to perform their duties. A similar sentiment was expressed by another interviewee who lamented that:

To be honest, you don't have the right to determine a vacancy.

You would be there when the Chief Executive Officer would send a relative or a friend to you, inviting you to find a way of getting him or her something to do in the firm (Interviewee 6).

This response indicates that the recruitment of candidates for the small-scale firms in the industry does not reflect the goal that effective recruitment is meant to attract, select, retain and promote the best possible candidates for job vacancies.

As a result, management cannot avoid undesirable recruitment costs, such as high staff turnover, poor performance and dissatisfied customers, which according to Bartunek and Moch (1987) and Misnan and Mohammed (2007), can endanger a mutually beneficial employment relationship between the employer and his employees. In general, these findings confirm the position of Owusu, Ayarkwa and Frimpong-Mensah (2012) that most positions in the sawmill industry in Ghana are occupied by unskilled workers trained in apprenticeship. According to Appiah-Kubi, Kankam and Adom-Asamoah (2012), the prevailing situation has led to a low efficiency, high waste, low incomes and poor product quality.

The HR professionals were further asked if they had written HR policies covering recruitment of potential employees for specific posts in their respective firms. One interviewee expressed the following sentiment:

There are professionally drafted recruitment policies with guidelines primarily designed to assist you in implementing effective and fair recruitment processes, which will contribute

to your success in appointing the best candidate to each post. But, in our circumstance, these policies do not represent anything. How can a family member or a well-known friend of the owner-manager fail to fill an existing vacancy or a newly created one simply because he or she could not meet the requirements of the recruitment process? (Interviewee 1)

A similar sentiment was expressed by another interviewee:

It is not about a policy. The issue is that you may take candidates through a recruitment process, following the guidelines in the policy, and nominate one or two for approval by the Chief Executive Officer. Surprisingly, a very different candidate reports for the job, and the reason is that the nominees couldn't meet the criteria of the Chief Executive Officer. To be honest with you, in this organization, there are no concrete recruitment criteria, and no committee overseeing the recruitment process (Interviewee 7).

These responses suggest that the perceived role of HRD professionals, in relation to the recruitment of candidates for job vacancies is mainly reserved for the Chief Executive Officer in the small and medium-scale firms of the sawmill industry in Ghana. This is inconsistent with the requirements of the new HRD practice as defined in the 2013 ASTD Training and Development Redefined Model. The Model provides HR professionals with an objective criterion for recruiting,

selecting, appraising, and developing their staff, as submitted by Arneson, Rothwell and Naughton (2013).

The lack of autonomy and empowerment on the part of the HRD professional to recruit suitable candidates for job vacancies means that the HRD function is not effective in the sawmill industry in Ghana. The recruitment function can play a pivotally important role in shaping an organisation's effectiveness and performance only if management is able to recruit candidates who already possess relevant knowledge, skills and aptitudes, and are able to make an accurate prediction regarding their future abilities. To achieve this, there must be consistently good levels of teamwork and an ongoing cooperation and consultation between line managers and the HRD manager. The HRD professional, as noted by Misnan and Mohammed (2007), must play a crucial "gatekeeper" role by recruiting only candidates who can be led, managed, and developed. The situation in the industry in Ghana is inconsistent with the position of Misnan and Mohammed (2007).

The lack of effective and efficient recruitment procedures is the cause of the high turnover rates and poor performance of the firms in the sawmill industry in Ghana. As noted by Ayarkwa (2009), at the current rate of mismanagement, it is estimated that, unless drastic and prudent measures are taken immediately to sustain and implore what is left, Ghana is likely to become a net importer of timber within 30 years.

The recruitment practices of these firms do not conform to "Best Practice" as submitted by Swanson (2008). The HRD professionals are not given the

requisite authority to perform functions that are intended to foster learning capacity at all levels of the organisation; to integrate a learning culture into overall business strategy; and to promote the organisation's efforts to achieve high performance by recruiting the most suitable candidates.

Following the preceding responses, there was the need to determine whether the HRD professionals were satisfied with the situation. All the respondents believed that the situation needed some changes in order to improve the performance of the firm and that of the HRD department. One interviewee expressed the following sentiment:

When making a decision on the most suitable applicant, candidates should be ranked suitable or unsuitable for appointment, based on their performance at interview(s) and the quality of their written application. The Chairperson should seek to facilitate the interview board in jointly completing an interview assessment form. This will detail an assessment of the candidate against the core competencies, knowledge, skills, attainments and behaviour required to carry out a particular role. This is good recruitment practice. Not where recruitment decisions are the sole responsibility of the Chief Executive Officer with nominal assistance from the HR Department? (Interviewee 3).

The preceding response indicates that HRD professionals in the small and medium-scale firms in the sawmill industry in Ghana are not satisfied with their

job. The HRD professional, according to Edvinsson and Sullivan (1996), is a change agent who must be positioned as a leader for acquiring, developing, and maintaining intellectual resources in the organisation. In the case of the small and medium-scale firms, however, the strategic role of the HRD professional is vested in the hands of the Chief Executive Officer. The HRD professional is not accorded the maximum right to assess the fit of prospective employees with the job or the organisation's culture, and this can be distressful for the HRD professionals who have to deal with unsuitable employees.

Again, the responses show that the Chief Executive Officer does not recognise the important role of the HR department. The behaviour of the Chief Executive Officer contrasts the findings of Grant (1996) that employers are now recognising that well-designed and implemented recruitment and selection programs produce concrete benefits, including reduced turnover, enhanced performance, lower levels of employee misconduct, as well as negative returns on investment. The Chief Executive Officer is also not aware that one of the most popular combinations of recruitment and selection tools used by contemporary management over the last few decades is the classic trio of C.Vs/application forms, interviews and references, as submitted by Cook (2004).

Finally, the responses indicate that there are no professional recruitment practices in the industry. The recruitment process begins with either the creation of a new position or an existing vacant position. Where the recruitment is as a result of a new position being created, the HR professional would be required to conduct a job analysis of the post in order to identify the key areas of

job. The HRD professional, according to Edvinsson and Sullivan (1996), is a change agent who must be positioned as a leader for acquiring, developing, and maintaining intellectual resources in the organisation. In the case of the small and medium-scale firms, however, the strategic role of the HRD professional is vested in the hands of the Chief Executive Officer. The HRD professional is not accorded the maximum right to assess the fit of prospective employees with the job or the organisation's culture, and this can be distressful for the HRD professionals who have to deal with unsuitable employees.

Again, the responses show that the Chief Executive Officer does not recognise the important role of the HR department. The behaviour of the Chief Executive Officer contrasts the findings of Grant (1996) that employers are now recognising that well-designed and implemented recruitment and selection programs produce concrete benefits, including reduced turnover, enhanced performance, lower levels of employee misconduct, as well as negative returns on investment. The Chief Executive Officer is also not aware that one of the most popular combinations of recruitment and selection tools used by contemporary management over the last few decades is the classic trio of C.Vs/application forms, interviews and references, as submitted by Cook (2004).

Finally, the responses indicate that there are no professional recruitment practices in the industry. The recruitment process begins with either the creation of a new position or an existing vacant position. Where the recruitment is as a result of a new position being created, the HR professional would be required to conduct a job analysis of the post in order to identify the key areas of

responsibility, including how the role may develop into the future, the reporting and working relationships of the post, and the impact the new position will have on existing roles in the industry. In relation to an existing post, he may be required to consider whether the job has changed, and whether the job description needs to be changed to accurately reflect the role and responsibilities of the post. These requirements, more than anything else, as noted by Kandula (2004), helps an employer to recruit the most suitable candidate for a job vacancy. Employees recruited this way, according to Swanson (2008), tend to achieve higher performance.

Attraction and Retention Practices

To elicit information on this theme, interviewees were asked to explain the actions taken to attract potential employees for their respective companies. The intent of this question was to determine the attractiveness of the sawmill industry to top quality talents and the strategies taken by management to retain those talents. This was considered important because, owing to the workplace challenge, long hours of work and the remoteness of the location of some sawmill firms in Ghana, the industry faces high rates of employee turnover.

All the HR professionals acknowledged the importance of employee attraction and retention. As noted by Interviewee 6:

Owing to skill shortage, constant employee-turnover, and remoteness of the location of sawmill firms in Ghana,

attracting and retaining talents is a major challenge in the industry (Interviewee 6).

This response indicates that the HR professionals of firms in the sawmill industry in Ghana are aware of the major reasons for the constraint on their ability to attract and or retain employees in the industry. It is for this reason that the industry cannot afford to recruit the needed technical manpower, as observed by Paulus (2009). But what stops the firms from sending their existing employees for further training at the Wood Industries Training Centre and motivating them to stay? Again, why should this be a general problem when some of the firms, such as the John Bitar & Co Limited (Western Region) and Naja David Veneer & Plywood Limited (Ashanti Region) are located in Takoradi and Kumasi Township respectively?

In a related question, another HRD professional submitted that the sawmill industry was not attractive at all. He explained that employees in the industry worked for long hours, sometimes closing after eight o' clock:

During busy times, some employees, especially those living afar, spent the night at the workplace. Meanwhile, there are no accommodation facilities on site. So you see them sleeping on the corridors in front of the offices. Others are made to work in the night due to work schedules. The conditions of service are bad. I have been here not too long ago but I have learnt that many brilliant guys came in and went after few years stay in the firm (Interviewee 6).

The preceding argument was supported by Interviewee 2. According to him, not much has been done by management to ensure the attraction and retention of employees in the industry:

At the current rate of exploitation and mismanagement, this industry would continue to face the non-availability of professionals, skilled technicians and artisans. Many have lost interest in the system. So, the few workers are just circulating in and out. Sometimes, we don't have people to work in some of the departments. So, I personally advised management to formulate policies and strategies for ensuring the attraction and retention of employees in the firm (Interviewee 2).

Overall, these findings are consistent with Misnan and Mohammed's (2007) proposition that, because of the high turnover rates, attracting and retaining top quality talents are central to the sawmill industry. They also corroborate with the findings of Bartunek and Moch (1987) that workplace challenges and the remoteness of the location of firms in the sawmill industry greatly affect its attractiveness to potential employees.

To this end, progress toward meeting attraction and retention goals should be measured regularly by management. In addition, HRD professionals must show genuine interest in their employees' development, growth and success. Where possible, accommodation facilities must be provided at the workplace so that employees can at least have somewhere to lay their heads during busy times. Common rooms can also be provided to serve as temporary places where employees can have some

rest. Night workers can also be given special incentives to boost their morale and commitment.

There were mixed responses when the interviewees were asked to explain the actions or measures taken to attract employees. One interviewee reported that employee attraction in the industry was based on the activities of welfare associations and how they were organized:

We have a strong welfare association, and membership is compulsory for every employee at all levels. Monthly dues are deducted at source from each employee's salary and the scheme is supported by management. The funds are used mainly for funerals, farewell parties, weddings, naming ceremonies and the like. In my opinion, such social events are important for attracting potential employees for the industry (Interviewee 9).

The preceding response indicates that the main strategy used to attract potential employees by management of firms in the sawmill industry was that of social events. Management believes that as those social events are organised outside the site, they, in a way, are evidence to the general public that there is cordial relationship among members of the firm. But how often are these events organised, and how large is the coverage? These and other questions mean that this strategy is not strong enough to serve as a source of attraction to potential employees. It is, therefore, imperative, as noted by Delery and Shaw (2001), to constantly review the effectiveness of the firms' talent attraction and retention

strategies and to assess if they are aligned with the demands and aspirations of the very individuals those strategies are targeted at.

Another interviewee, however, mentioned social responsibility as the major factor contributing to employee attraction in the sawmill industry, especially in the Western Region in Ghana:

Apart from the fact that we serve as a strong employment base, we are also into helping the society. We produce plywood, and its quality is appreciated even beyond the borders of Ghana. We export timber products to Asia, India, China and the rest of Europe. In one way or the other, the quality of our products is the key factor in attracting potential employees for the firm (Interviewee 1).

One of the HRD professionals, however, shared a different view. In his opinion, the interaction between management and employees, and the cordiality of this relationship were the major factors that attracted potential employees to the firms;

It is about how we relate to employees that make people come to work here. We have dual communication between management and employees, and no one feels intimidated. This relationship extends beyond the workplace, and it is clear for one to see. Hardly may you see the difference between subordinates and superiors (Interviewee 4).

Another sentiment was expressed by Interviewee 3. According to him, the conditions of service of members in the sawmill industry contributed significantly to enhance the attractiveness of the industry to potential employees:

We give employees some incentives like overtime, professional allowances, transport allowance, rent allowances, risk allowances, long service allowances and others. Where a staff is required to work to cover services in the evening, at night, over the weekend or general public holidays, management has agreed that they should receive unsocial hour's payments. To me, these opportunities are more than enough to attract potential employee to the industry (Interviewee 3).

This argument corroborates the conclusions drawn by Nicoleta (2011) that potential employees prefer to work in organisations that offer better conditions of service and better salaries. But while the argument finds support from the literature, it is the belief of the researcher that unless these conditions of service and salaries are communicated to members of the external environment, they cannot serve as a source of attraction to anyone.

When asked about whether the public was aware of the rich conditions of service in the industry, one interviewee made the following statement:

Officially, we have not made any attempt to communicate with the public about how we handle our employees in this firm. We think it is good to keep such issues secret in order not to be copied by competitors. If you reveal your secrets, your competitor will easily snatch all your quality talents. Perhaps,

the employees talk to their friends and relatives about the conditions of service and that is why some potential employees get attracted to the firm (Interviewer 1).

This response indicates that, even if management has put in place strategies for attracting potential employees, this strategy is either weak or incomplete. An effective attraction strategy rests on a combination of factors and each of these factors (e.g. compensation, benefits, scheduling, and development), as noted by Nicoleta (2011), must form part of the strategy. The conditions of service of a particular firm, as noted by Delery and Shaw (2001), have a significant influence on potential employees' perceptions of the attractiveness of an organisation. As a result, it is important for management to communicate to the public about the existing conditions of service.

Training and Development Practices

Another important theme that was considered in the study relates to employee training and development practices in the sawmill industry. Training and development has a significant role to play in aligning the firm's human resource capability with its goals and strategies. Employee training and development also encourages organisational creativity, ensures inventiveness and shapes the entire organisational knowledge. The reason for soliciting information on training and development practices of firms in the sawmill industry was to determine whether those practices were able to create new knowledge, increase

the competitiveness of the firms and align with the goals and expectations of those firms and their employees.

The first issue of interest was whether the firms had a formal training and development policy for both staff and senior management. A training and development policy provides management with a formal framework within which decisions relating to training and development are administered. Surprisingly, the small and some medium-scale firms in the industry did not have a formal training and development policy:

There is only a structured five-day induction training course for new employees. This provides newcomers with a detailed overview of the organisation, along with a full description of the job. Beyond this entry-level, formal training and development programmes become the sole responsibility of the employee. Even getting the chance to use your own money to go for further studies or training is conditioned on your resignation. The last time I raised the issue of having a formal training and development policy, I was told there is an interest-free career development loan which anyone can request for, and this has been mentioned several times (Interviewee 5).

This response indicates that the small and some medium-scale firms in the industry do not actually understand the usefulness of HRD policies. HRD policies guide the decisions and actions of management, and ensure consistency, uniformity, and fairness in human resource administration. The formulation of a

training and development policy shows the firm's preparedness to support and encourage learning among employees. The absence of a formal training and development policy implies that firms in the sawmill industry in Ghana are not proactively resourced with people who have appropriate skills, knowledge and experience at all times. They solely depend on the knowledge employees brought into the firm. This contrasts with Vemic's (2007) submission that contemporary businesses now require more and more knowledge and new skills that cannot be provided in the formal school education.

The absence of a training and development policy means that employees are not encouraged to develop and progress within the organisation. It is an indication that management is not committed to providing relevant skills and knowledge to their staff. This practice, according to Mamoria (1995), negatively influences the market value, earning power and job security of the employee, and does not help him or her to make a better and economic use of materials and equipment. It also shows that employees who choose to work in such organisations would not get the necessary support to fulfill their full potential in the course of their employment. HRD professionals in such organizations may also find it difficult to align employee capacity with the changing strategic goals of the firm. This practice contradicts with the findings of Jacobs (2003) that a training and development policy ensures that time and money invested in training and development is linked with the mission or core business of the firm.

All the HRD professionals of the large-scale sawmill firms indicated that their companies had a training and development policy. When asked whether

there was the need to invest huge sums of money to develop a training and development policy, one interviewee made the following comment:

We have a training and development policy which is revised twice each year by an experienced consultant. I hope you know what I mean by an experienced consultant. The cost of the policy is not our headache but what we intend to derive from it. Staff development enhances the skills, knowledge, competence, and working practices of both senior management and staff. We are aware that it is only through training and development that we can strategically align workforce capacity with the goals and objectives of the firm. The employee is a major asset to our company, and this asset is a depreciating asset that needs continuing investment through training and development (Interviewee 1).

The preceding response reinforces the conclusions drawn by several studies that training and development are major components in human resource development practice. In the studies conducted by Swanson (2008), Teodorescu (2006), Dilworth (2003), Donavan and Marsick (2000), and McLagan (1989), training and development were identified as key components of human resource development practice. The recognition that training and development are major components of staff development and organisational success shows that large scale firms in the sawmill industry in Ghana have good training and development

practices, which, according to Mamoria (1995), tend to assist employees to develop and rise within the organisation.

Large-scale firms in the sawmill industry conduct staff training and development need assessment in a variety of ways: by skills audit; by feedback; and by staff performance appraisal. In these firms, each staff's performance is appraised at least twice in each year by the HR Department or line manager. These appraisals help management to determine whether there is a gap between the competencies which are required for the effective performance of a job and the competencies actually possessed by the job holder, so as to identify the types of learning interventions that would help bridge the gap.

The usual practice of management is to conduct a training need assessment before developing and implementing any training programme. This activity is carried out at three levels, namely: the organisational; departmental; and individual. At the organisational level, management examines where training is needed and under what conditions the training will be conducted. This involves identifying knowledge, skills and abilities that employees will need in the future.

At the departmental level, management compares job requirements with employee specifications to determine training needs. Any gap between these variables indicates a need for task training. The individual level analysis examines those who currently occupy the jobs to see whether they possess the requisite skills, knowledge and abilities necessary to do the job. Information or data from an employee's performance review is the most common method.

Once training needs have been analysed, management then develops the training proposal. The proposal spells out the need for training, the expected results, the people to be trained and the possible consequences, if management fails to conduct the training. It is only when this proposal is approved by the chief executive officer that any training programme can be conducted. The responsibility for training and development lies with individual employees and their supervisor. The HRD professional's responsibility is to ensure the effective implementation, co-ordination and monitoring of the training programme.

An attempt was made to find out whether training opportunities were available to both staff and senior management. It was also intended to find out whether those opportunities were provided on the basis of equity, seniority or otherwise. To this end, the following response was made:

There is equality of access to staff training and development opportunities for all staff in this company. We are bent on ensuring that all staff members of the company are trained, appraised, given access to relevant work experience, promoted, and otherwise treated on the basis of their relevant merits, qualifications, abilities and experience. No member of staff is treated less favourably than another. Our training and development policy is based on the law relating to Equal Employment Opportunity as enshrined in the Equal Opportunity Act of 2010 (Number 16) (Interviewee 4).

This response suggests that large-scale firms in the sawmill industry have equitable training and development opportunities for both staff and senior management. The equality of training and development opportunities for both staff and senior management means that employers in these firms are committed to the growth and development of their workforce. This practice, according to Storey and Sisson (1993), promotes higher job satisfaction and lower employee turnover. The adherence to the concept of Equal Employment Opportunity also indicates that these companies incorporate the Ghana labour laws in the design and implementation of their training programmes.

There were mixed responses when an attempt was made to determine the methods used for training and developing employees. Out of the seven interviewees who indicated that training and development opportunities were available for all staff, four of them stated that all training programmes in their respective firms were in-house:

We believe that management skills and abilities cannot be acquired just by listening and observing or by reading books in the classroom. Managerial skills are effectively acquired through actual practice and experience on-the-job. So most of the time, we use methods, such as coaching, job rotation, and lateral transfers (Interviewee 2).

The response from Interviewee 2 indicates that on-the job training practices were most frequently used methods for training employees in the large scale firms in the sawmill industry. This method of training allows trainees to acquire skills in

the real work situation by actually using the machinery and the materials involved in performing the job, as submitted by Ongori and Ozonzo (2011). Following this practice, it is possible for trainees to transfer what they have learnt to the work situation. These results are consistent with the findings of Sims (2006) that on-the-job training allows a positive transfer of what the trainee has learnt from a training programme to the workplace.

The remaining three interviewees, however, hinted that they combined both on-the-job and off-the-job methods in their training programmes. According to them, while on-the-job experience constituted the core of management training policy in their respective companies, certain methods of development were organised away from the job to supplement those in-house experiences. They deemed this to be necessary because, in their opinion, not all experiences were available within the organisation. These results are consistent with Jacobs's (2003) submission that off-the-job training is necessary because it supplements in-house training by providing specific expertise, equipment, or experiences that are readily not available within the organisation.

The large-scale firms in the sawmill industry organised off-the-job training programmes by means of special programmes or seminars within or outside their respective companies:

When special programmes, such as time management, assertiveness training, strategic training, employee appraisal, creative thinking, stress management, interpersonal skills, listening skills, and management of change are involved, we

sometimes take trainees away from their usual locations but still within the organisation's facilities. Otherwise, they are trained in locations outside the organisation. In each case, training is delivered through lecture, role play, management games, vestibule training, case studies, structured experience and simulation (Interviewee 8).

The main drawback of this training practice is that training effectiveness may be constrained because of the inability of trainees to transfer the skills, knowledge and abilities they gain from training to their jobs or the workplace. This confirms what Jacobs (2003) described as the main setback of off-the-job training, and his subsequent advice that the environment where off-the-job training is conducted should be designed or controlled to maximize the transfer of the learning gained by trainees. HRD professionals in these companies must, therefore, note that the more the learning and working environment are related to the trainee, the more the transfer of learning takes place.

A section of the interview on training and development practices of firms in the sawmill industry focused on the effectiveness of those programmes. The intention was to determine how those programmes were measured, and to assess whether the time, energy and other resources invested in training had contributed to the growth and success of the sawmill firms in the country. The participants believed that the assessment of training programmes was important because the practice helped HRD professionals to measure the return on investment in training:

Planning and organising training for employees represent an investment by an organisation. And, as in other areas of investment, every organisation expects a return on its investment in training. In this company, trainees are tested before, during and after each training programme. The effectiveness of the training programme is evaluated from four angles; the level of trainee's satisfaction with the training, the learning gained by the trainee, the on-the-job application of the learning gained by the trainee, and the impact that the application of knowledge and skills by trainees have had on the operations of the organisation (Interviewee 3).

This response indicates that, after training programmes have been designed and delivered in accordance with the learning needs of trainees, the next phase in the training process, as far as the large and some medium scale sawmill firms were concerned, was to assess the whole training programme in terms of its impact on the knowledge and behavior of program participants or the organisation in which the trainees worked. This practice is important because it allows management to determine how well a program is implemented, how much knowledge is gained by trainees, and the outcomes of the training programme as a whole. In this way, the results from employee training programmes or some aspect of the programme can guide the practitioner to make necessary decisions about promotions, further training, and the design of employee compensation, as submitted by Katrina, Andrea and Gabriela (2013).

Appraisal Strategies and Practices

Another HRD practice that was considered important in this study was performance appraisal, and how it was used both as an evaluative and developmental tool in the sawmill industry. An effective performance appraisal practice is important because it assists management to determine how well employees have met their standards. Data on performance appraisal has frequently been used in making such administrative decisions, such as pay increases, promotions, transfers, or terminations.

It was apparent from the interview that not much importance has been placed on employee performance appraisals in the selected firms of the sawmill industry in Ghana. All respondents acknowledged the existence of some performance appraisal systems, but the appraisal practices were either informal or sub-standard. When asked about the value placed on performance appraisal, one interviewee submitted:

Performance appraisal aims to recognise current skills' status of the work force. Any standard appraisal system must be able to provide accurate unbiased appraisal assessment in order to measure the employees' contribution to the organization. But here we are, trying to assess employee performance on the basis of only reporting and closing times (Interviewee 6).

Another interviewee shared a similar sentiment:

There is performance appraisal each year. But, these are done by departmental heads who only classify employees into

Excellent, Very Good, Good, Poor or Very Poor categories, based on attendance. These results are then sent to the Managing Director for his approval. Most of the employees are not happy after seeing their position on this scale, a point that leads to discontent among most of the employees in the company (Interviewee 8).

The preceding responses show that some performance appraisal systems existed in each of the selected firms. But, these were anchored on attendance rather than the value and contribution of the employee to the organisation. It was, therefore, important for the researcher to find out whether the companies utilised their performance appraisal results in other areas of human resource management, particularly in the areas of reward, promotion, and personnel planning. In response to the question whether the appraisal results were used elsewhere, one interviewee hinted that the head of department had no time to discuss the results with subordinates:

The performance appraisal system is characteristically one-way, and no one has an idea as to how the results are used.

The inability of firms in the sawmill industry in Ghana to install an effective performance appraisal strategy has the tendency of hindering their competitiveness. In the sawmill industry, performance appraisal is viewed and conducted solely in terms of its evaluative aspect, thereby constraining its relevance for facilitating growth and development of employees through training, coaching, counselling and feedback of appraisal information. This practice is inconsistent with Katrina, Andrea and Gabriela's (2013) proposition that performance appraisal is only useful when it is able to provide feedback that

serves as the basis for promotions, compensation, human resource planning, and career development.

The preceding responses also indicate that HRD professionals in the sawmill industry have failed to serve as change agents, capable of enhancing employee's capacity to learn, help groups to overcome barriers to learning, and create an organisational culture that fosters learning, as proposed by Senge (1990). Organisational performance and its resultant efficiency and effectiveness can only be achieved when individuals are continuously appraised and evaluated. Moreover, as noted by Bartunek and Moch (1987), post-appraisal counselling would be needed to explain the identified strengths and weaknesses of each employee in order to prepare him or her for the future. In the 21st Century, as submitted by Ahmad and Bujang (2013), performance appraisal goes beyond the periodic and impartial rating of an employee's excellence to include matters pertaining to his present job and his potential for a better job in the future.

The preceding discussion implies that firms in the sawmill industry in Ghana require a 360 degrees appraisal method whereby superiors appraise their subordinates, subordinates appraise their superior, appraisees appraise themselves, and the average of the entire appraisals taken to arrive at the final appraisal outcome of the employee's contribution to the organisation. According to Ahmad and Bujang (2013), this is what contemporary organisations require to succeed. The authors share the view that, though immediate supervisors are usually in an excellent position to observe the employee's job performance on daily basis, some

supervisors have been known to manipulate appraisal outcomes to justify subjective pay increases and promotions.

In general, the responses to the questions on performance appraisal systems show that the appraisal outcomes cannot be used to make valid decisions, justify terminations, identify training and development needs, and defend personnel decisions. There is a need to increase the perceived equity of employees on the performance appraisal results before they can be used meaningfully.

Reward Systems and Practices

Though the professional expertise of HRD professionals is traditionally examined by paying attention to only the major areas of HRD practice, such as employee attraction and retention, recruitment and selection, training and development, performance appraisal, career development, health and safety, and organisational development, it is the belief of the researcher that employee compensation can play a significant role in determining the success of each of these major HRD practices. There was, therefore, a strong need to establish the level to which the sawmill firms had ventured into the area of employee compensation. Questions were raised concerning both cash and non-cash compensations, and respondents were asked to express their perceptions of the pay system in the industry.

The general approach to reward management was found to be similar across all the categories of sawmill firms in the industry. The basic feature of the reward package was that of a base pay and some incentive payments. When the

interviewees were asked to express their opinion on the salary and wages offered by management, and their association with job satisfaction, commitment, and, ultimately, retention, one interviewee made the following comment:

It appears managers have missed the point when it comes to employee compensation in this company. The salary structure was designed by an external consultant some years ago. And no one dared to change it. The system, including such elements as pay, working conditions, fringe benefits, security, promotion, contract of service, the work environment and conditions of service, is static. But where else can we go when we simply cannot afford to quit for fear of being unemployed?

(Interviewee 2).

This response indicates that, in Ghana, employees in the sawmill industry are not satisfied with their reward systems. It also shows that if they have better options, they would quit the industry. This attitude is consistent with previous findings by Chelladurai (2006) that an employee who feels insufficiently rewarded for effort will be more likely to quit the current organisation. In extreme cases, the dissatisfaction with pay may lead to absenteeism, low commitment to company objectives, tardiness and even sabotage of other organisational members, as reported by De Cieri and Kramar (2008). In a situation like this, any increase in salary would show management's recognition of the workforce.

In response to whether their pay levels were equitable and competitive, one participant reported:

I feel that employees in the industry are generally under-paid. Most of the jobs are very dangerous and risky. I am feeling that the salaries we receive do not commensurate with the hazards surrounding the job.

Another participant made a similar report:

This is the third sawmill firm I have worked for. The pay is the same everywhere. In my opinion, there is no equity; we are putting in more effort than we receive in return.

These responses indicate that, in the opinion of employees in the sawmill industry compensation does not reflect the time, energy, and effort they contribute to the organisation. According to Ryan and Sagas (2009), such a situation generates feelings of dissatisfaction among talented employees. It also constrains the employer's ability to compete for employees in the labor market as submitted by Selden and Moynihan (2000).

Another attempt was made to find out whether the compensation package included some benefits and allowances. There were mixed feelings. Four participants felt that, aside from the salary and wages paid to employees, there were health insurance facilities, interest-free loans, funeral donations and some assistance during further education and training of qualified employees. The five remaining participants simply felt that such benefits were differently managed in their respective companies. According to one of them, the company granted such benefits but deducted the cost on installment basis from one's salary:

A benefit is given as part of compensation in order to attract and retain desired talents for superior performance. It is part of the employee's salary which must not be repaid.

This response is consistent with the position of De Cieri and Kramar (2008) that the way employee compensation is managed can significantly affect employee attraction, retention and quality of work performance.

Health and Safety Practices

The health, safety and security of employees in the sawmill industry in Ghana were of principal concern to the researcher. Employees in the sawmill industry face a variety of workplace hazards, including the risk of acute and long-term disabilities due to the constant motion and intense physical labour, poor sanitation and inadequate facilities at worksites. The sawmill industry, like mining, quarrying, logging and forestry, is among the most dangerous industries where employee health and safety is undermined by deficient hygiene and sanitation, unsafe personal protective equipment, including gloves, helmets, goggles and the exposure to hazardous agents, such as dust and gases from which employees easily develop chronic and acute respiratory ailments (Misnan & Mohammed, 2007).

Following the preceding observation, the interviewees were asked to describe the nature of accidents in the industry and their consequences. One interviewee explained that physical injury, resulting from slip and fall objects, electronic contact, contacts with harmful substances, radiation and inhalation,

machine disorders, noise-induced hearing loss, and attacks from wild animals were the major forms of accident in the sawmill industry in Ghana. According to him, many sawmill workers inhaled a substantial amount of sawdust daily and this had often created ailments, such as headaches, which in certain cases had led to loss of lives. Another interviewee, however, made a comment regarding a specific department as follows:

In the Plywood Department, for instance, many of the machines were found to release some dangerous chemicals resulting in headaches, loss of sight, brain damage and mental disability. It was also found that workers could develop chronic discomfort, pain and functional impairment as a result of the numerous repeated movements in that department (Interviewer 7).

The preceding responses indicate that the prevalence of physical injury is one major challenge facing the sawmill industry in Ghana. These responses are consistent with the findings of Misnan and Mohammed (2007) that accidents form a significant part of the challenges facing the sawmill industry. They also corroborate the findings of Thai and Grewal (2007) that the sawmill industry is among the most dangerous, risky and hazardous industries in Ghana.

There was, however, a sharp contrast from another interviewee who submitted that many of the accidents in the industry were caused as a result of human error. According to him, every employee, upon appointment, is taken through a health and safety orientation programme. But, some of the workers have

not taken the responsibility of educating themselves on the health and safety policies and procedures laid down by the company or adhering to the health and safety orientation guide for employees:

They take the orientation programmes for granted. But, while it is the employer's duty to develop a health and safety management system, the system will only be as good as the mandatory enforcement of the required practices. Why won't we record accidents if we intentionally fail to do what is right?

(Interviewee 5)

The above response indicates that most of the accidents in the industry are preventable as they are often caused by ignorance on the part of the employee. This result is consistent with the findings of Goetsch (2005) that workplace accidents mainly originate from the human aspect of the organisation. According to the author, the beliefs and attitudes of employees working within the organization, rather than engineering safety through technological improvement, are the hallmark of the causes of industrial accidents.

Improving the Academic Qualification of Staff in the Sawmill Industry

The academic qualification of staff of firms in the sawmill industry in Ghana need to be improved if they are to properly implement the HRD competency models as required by the American Society for Training and Development (ASTD). The HRD professionals must be given the chance to attend PHD programmes in HRD, and this must be followed by a professional training in both HRM and HRD with either the Chartered Institute for Personnel and

Development or the Institute of Human Resource Management Practitioners, Ghana. They can also enrol on Weekend programmes which are likely not to distract working hours. For efficient and effective implementation of a programme for improving the qualification of staff in the industry, the HRD professionals in consultation with line managers must formulate training and development policy. The policy document must specify when one is qualified to embark on a training programme, and the implementation must be equitable without any discriminations.

While those with master's degree will be aiming at the doctoral degrees, the staff with first degree will be trying to pursue master's programmes, and so on and so forth. In addition to this, some conferences and workshops for staff can also help.

Summary

The chapter has provided a good insight into the HRD practices of firms in the sawmill industry in Ghana. It is evident from the preceding analysis that management of firms in the industry recognised HRD as an important part of their human resource management. The most common HRD practices included: recruitment and selection, attraction and retention, training and development, appraisals strategies, reward systems, and health and safety practices. While these practices differed from one firm to another, they generally resulted in the development of more competent, satisfied and committed staff.

The results showed that the large-scale sawmill firms in the industry used formal recruitment practices that were similar to conducting job analysis before any recruitment exercise, posting vacancies on the notice-boards or in the newsletters, and taking candidates through rigorous screening tests. They also preferred internal recruitment as long as an existing employee possessed the required skills and abilities. In the case of the medium and small-scale firms, the responsibility for recruiting potential candidates was often exercised by the CEO who often did not have the requisite qualification. This practice only saw family members or friends and their relatives being appointed when there was job vacancy. But, in most cases, such individuals tended to be very difficult to manage, thereby making the work of HRD professionals unnecessarily difficult.

Furthermore, the results showed that some HRD practices were difficult to implement in the sawmill industry. Employee attraction was often constrained by the remoteness of the location of sawmill firms. The inability to attract employees also made it difficult for management to recruit and retain competent employees in the industry. Moreover, measures taken to attract potential employees were very weak and unreliable. Social events, such as funerals, farewell parties, weddings, and naming ceremonies, limited coverage for attracting technically competent employees to a company whose location was already a problem.

The medium and small-scale sawmill firms in the industry did not have a formal training and development policy. There was, therefore, no formal framework for determining when, how and which employees should be trained or developed. In the case of the large firms, formal training and development

policies existed and were revised twice each year by a consultant. Consequently, each time there was the need for further training and development, the usual practice was that trainee needs analysis were conducted at the organisational, departmental and individual levels in order to identify employees who needed further training and development. There was also equality of access to staff training and development opportunities for all employees in the large-scale sawmill firms. With regard to the actual training, both on-the-job and off-the-job training approaches were used.

Performance appraisal was conducted by the heads of department in each operating year, in all three types of sawmill firms. The problem, however, was that most appraisals took the form of attendance and reporting times, rather than being geared towards the contribution of the employee towards the achievement of organisational goals and objectives. The performance appraisal results were often not used. Feedback was only given when a particular employee was found to perform below what was expected.

Pay levels were generally very low and static. Most of the employees felt that their salaries were not commensurate with their performance. But, for fear of being unemployed, they decided to stay. Management had taken steps to educate employees on health and safety issues in the industry. However, some of the employees intentionally refused to follow the health and safety guide provided by management. In other words, most of the accidents in the industry were preventable. They occurred as a result of human error which could be monitored and controlled.

CHAPTER EIGHT

SOCIAL CAPITAL FOR EFFECTIVE HRD PRACTICE IN THE SAWMILL INDUSTRY IN GHANA

Introduction

As a sequel to the previous one, this chapter explores the institutional arrangements of top management for promoting social capital in HRD practices of firms in the sawmill industry. The chapter is divided into three sections: Section One presents the socio-demographic characteristics of the respondents, while Section Two focuses on the institutional arrangements for promoting social capital in the sawmill industry in Ghana. The last section focuses on the contribution social capital makes to HRD practice in the sawmill industry.

Demographic Characteristics of Managerial and Non-Managerial Staff

Following the literature review, four demographic characteristics were considered relevant for this study. These characteristics, which include age, sex, academic qualification and work experience, have some implications for the stock of social capital available to a group or the organisation.

Three groups of respondents provided the information required for this chapter. They included HR professionals, line managers, and non-managerial employees in the sawmill industry in Ghana. As the demographic characteristics of the HR professionals had already been presented in Chapter Seven, this section concentrates on only the socio-demographic characteristics of the line managers and non-managerial employees. Following the outcomes of previous studies that

linked social capital to some socio-economic and demographic characteristics of respondents, the survey questionnaire for this study included questions about the age, sex, education and the number of years the respondents had lived and worked in their respective organisations. These characteristics are discussed in the following section.

Age-Sex Distribution of Line Managers

The age-sex distribution of line managers is presented in Table 8. With respect to age, the respondents have been classified into three: line managers up to 40 years (the youth), those from 41 to 60 (the adults) and those equal to or above 60 years (the aged). Profiled by these age categories, 41.10 percent represented the youth, 55.60 percent represented the adults and 3.30 percent represented the aged. Table 8 indicates that there are more adult-line managers (55.60%) in the sawmill industry than any of the age groups. The least number of line managers (3.30%), however, are those equal to or above 60 years.

The sawmill industry in Ghana has a greater potential to create social capital among their line managers. This is explained by the fact that many of the line managers are either in the adult age group (55.60%) or the aged (3.30%). Previous studies have shown that older employees are more likely to achieve higher levels of social capital than the youth (Akapbio, 2008; Adeyeye, 1991). It has also been confirmed by Kapucu (2011) that young adults represent the most social capital in contemporary business, as they constantly go through change.

Out of the 90 line managers who participated in the survey, 70 percent were males and the remaining 30 percent were females. Line managers in the sawmill industry have a higher degree of access to bonding and linking social capital. This is explained by the fact that majority of them (70%) are males. Many studies have established the gendered nature of social capital. In most of these studies (Loscocco, Monnat, Moore & Lauber, 2009; Klyver & Terjesen, 2007), males were found to have a higher degree of access to bonding and linking social capital than women. It was also established that males put more effort into both social and professional clubs and societies than women (Cromie, 1992). Thus, given a male population of 70 percent, which is more than twice the number of females, only a small amount of effort would be required by management to promote social capital in the sawmill industry in Ghana.

Table 8-Age-Sex Distribution of Line Managers

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Up to 40	26	41.30	11	40.70	37	41.10
41 – 60	36	57.10	14	51.90	50	55.60
Above 60	1	1.60	2	7.40	3	3.30
Total	63	100.00	27	100.00	90	100.00

Source: Fieldwork, 2015

Education Qualification of Line Managers

The line managers were also classified into various levels of academic attainment: 7.80 percent of them had the Master's degree in management programmes; 33.30 percent had completed the Bachelor's degree; 44.40 percent

hold the Higher National Diploma and 14.50 percent had other certificates, as shown in Table 9.

Table 9-Academic Qualification of Line Managers

Qualification	Number	Percent
Master's Degree	7	7.80
Bachelor's Degree	30	33.30
Higher National Diploma	40	44.40
Others	13	14.50
Total	90	100.00

Source: Fieldwork, 2015

The vast majority (85.50%) of the line managers had obtained educational qualifications at the tertiary level. They included the line managers who held the Master's Degree (7.80%) and those holding the Bachelor's Degree. The rest were the line managers who had the Higher National Diploma. The line managers in the sawmill industry were found to have higher trust in each other. They easily formed social groups and participated fully in social activities. These results are consistent with the findings of Glaeser and Goddard (2003) and Alesina and Ferrara (2000), who maintained that highly qualified employees build social networks than their counterparts without such qualifications. In the opinion of Nie, Junn and Stehlik-Barry (1996), even the less educated members may be influenced by their highly educated colleagues to join social groups.

Work Experience of Line Managers and Non-Managerial Employees

The work experience of the line managers and non-managerial employees was also relevant in this study. The minimum and maximum length of service for

the line managers were four and 24 years. The mean length of service was 13.50 (median = 14; skewness = 0.21). As compared to the line managers, the respective minimum and maximum length of service for the non-managerial employees were one and 24 years. The mean length of service was 6.68 (median = 6; skewness = 0.86). The results are presented in Table 10.

Table 10-Work Experience of Line Managers and Non-Managerial Staff

Respondent	Number	Mean score	Median	Skewness
Line managers	90	13.50	14	0.21
Non-managerial employees	183	6.68	6	0.86

Source: Fieldwork, 2015

The evidence shows that, in general, the line managers had served longer than the non-managerial employees. This is expected as one needs to serve longer in order to become a manager. The long stay in the industry means that members have enough time to establish cohesive relationships among themselves, making it easy for management to promote social capital among the workforce, as concluded by Haythornthwaite and Kendall (2010).

Age-Sex Distribution of Non-Managerial Employees

The age-sex distribution of non-managerial employees is presented in Table 11. Much like line managers, the non-managerial respondents were classified into three age groups: employees up to 40 years (the youth), those from 41 to 60 (the adults) and those above 60 (the aged). Following this distribution,

32.20 percent of the non-managerial employees represented the youth, 60.10 percent formed the adult group and 7.70 percent represented the aged.

Table 11-Age-Sex Distribution of Non-Managerial Staff

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Up to 40	50	34.00	9	25.00	59	32.20
41 – 60	86	58.50	24	66.70	110	60.10
Above 60	11	7.50	3	8.30	14	7.70
Total	147	100.00	36	100.00	183	100.00

Source: Fieldwork, 2015

Again, adults and the aged formed the majority of non-managerial employees in the study. They constituted 67.80 percent of the non-managerial workforce. A high concentration of employees in the adult and aged group has been linked with a very strong urge to form social networks. For instance, as shown by Kapucu (2011) and Akapbio (2008), having a substantial proportion of employees in the adult and aged group has a greater potential to create social capital among members in the organisation.

Table 11 also shows the sex distribution of non-managerial employees in the study. The majority (80.30%) of non-managerial employees were males, while the rest were females. A study by Cromie (1992) has shown that, having majority of male-employees has the potential of enabling management to promote strong social capital in an organisation. This conclusion, however, must be taken with caution as some other studies, such as those conducted by Loscocco, Monnat, Moore and Lauber (2009) and Klyver and Terjesen (2007), have shown that, compared to men, women have weak ties in their networks, which are more

beneficial for their businesses than strong ties. In other words, it would not be ideal to impose strong ties on women, if weak ties can help.

Academic Qualification of Non-Managerial Employees

When profiled by academic qualification, 65.60 percent of the non-managerial employees had earned certificates at the tertiary level, (27.30 percent held the Bachelor's degree, while the remaining 38.30 percent had earned the Higher National Diploma). There were only 63 (34.40%) employees without a tertiary degree or the diploma (Table 12). Previous studies have shown that employees with a high level of educational attainment are likely to trust one another and to indulge in social activities (Glaeser & Goddard, 2003; Alesina & Ferrara, 2000; Putnam, 1993). Nie, Junn and Stehlik-Barry (1996) have also argued that group members without higher level academic qualification could also be influenced by the highly educated colleagues to join social groups and to participate fully in all social activities.

Table 12-Academic Qualification of Non-Managerial Staff

Qualification	Number	Percent
Bachelor's Degree	50	27.30
Higher National Diploma	70	38.30
Senior High School	60	32.80
Others	3	1.60
Total	183	100.00

Source: Fieldwork, 2015

In conclusion, it can be said that, in addition to their implication for promoting social capital in the industry, the background characteristics of

respondents have shown they have the necessary level of maturity, objectivity, authority and independence to provide actionable and meaningful information on which research reports and decisions can be made.

Promoting Social Capital in the Sawmill Industry in Ghana

This section examines the institutional arrangements for promoting social capital in the sawmill industry in Ghana. Eleven areas are covered, namely: coordinating individual, units and departmental activities; promoting employee participation in cross-functional teamwork; treating employees as the most valuable asset; collaborating with other sawmill firms in the industry; adhering to mutually agreed rules, norms and sanctions; encouraging collective problem-solving; providing avenue for employees to talk on their work-related issues; informing employees about the goals and values of the organisation; resolving disputes and conflicts among employees; promoting networks of alliances with competitors, customers and suppliers; and organising annual social events. The discussion on these responses uses both descriptive and inferential statistics. After each issue is discussed, the results are supplemented or supported by qualitative data from the HRD professionals.

Coordinating Activities in the Sawmill Industry

The first issue that was examined under institutional arrangement for promoting social capital in HRD practice was on how managers coordinated the activities of individuals, units or departments in the sawmill industry in Ghana.

The results for both line managers and non-managerial employees are presented in Table 13.

Table 13-Coordination of Activities of Individuals, Units and Departments

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.61	3.00	2	.92	-.01	1	4
Line managers	2.82	3.00	3	.87	-.17	1	4

Source: Fieldwork, 2015

The mean score of 2.61 (skewness = -.01, median = 3.00) and a standard deviation of .918 show that the non-managerial employees were inclined to agree that managers coordinated the activities of individuals, units and departments in the sawmill industry in Ghana (the theoretical average for scales 1, 2, 3, and 4 is 2.50, which is less than 2.61). This finding is consistent with that of Alexopoulos and Monks (2004) who researched into the contribution social capital made to HRD practice in intra-organisational knowledge sharing. According to the authors, the mere possession of a potentially valuable skill or knowledge by one particular employee does not necessarily mean that other employees can benefit from that skill unless the individual skills are collectively managed. In their opinion, the main task of the HRD professionals is to facilitate the integration and coordination of otherwise fragmented and asymmetrically distributed skills of the organisation.

When data on the coordination of activities of individuals, units or departments were disaggregated with respect to firm types, similar views, as in the preceding paragraph, were obtained. The respondents felt that management had done well with respect to the coordination of activities in the industry. The

mean score was almost the same for each firm type: 2.62 (skewness = .02, SD = .92) for the large scale, 2.62 (skewness = -.17, SD = .87) for the medium-scale and 2.57 (skewness = .09, SD = 1.03) for the small-scale firms. Thus, the coordination of activities of individuals, units or departments is viewed similarly across the firm types in the sawmill industry in Ghana. Again, this finding is consistent with the conclusions drawn by Alexopoulos and Monks (2004) that the emergent role of the HR professional was to shift HRD practice from those traditionally rigid organisational structures to a more fluid structure through social networking.

Compared to the non-managerial employees, the line managers highly agreed that managers coordinate the activities of individuals, units and departments in the sawmill industry in Ghana. The mean score on this issue was 2.82 (skewness = -.17, median = 3.00) with a standard deviation of .87. When the data were disaggregated with respect to firm types, there was no difference in the views expressed by the line managers. The medium-scale firms had the highest mean score of 3.00, followed by the large-scale of 2.74. The small-scale firms recorded the least mean score of 2.69. The coordination of activities in the industry is important because, as noted by Andrews (2009), it facilitates the interaction among employees, thereby allowing them to share useful knowledge.

Cross-Functional Teamwork Among Staff

The institutional arrangement for promoting social capital in the industry was measured in respect of employee participation in cross-functional teamwork. Surprisingly, both line managers and non-managerial employees recorded the

same mean value of 2.67 and a median of 3.00, with a standard deviation of .91 and .90 respectively. The detailed results are presented in Table 14.

Table 14-*Employee Participation in Cross-Functional Teamwork*

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.67	3.00	3	.91	-.19	1	4
Line managers	2.67	3.00	3	.90	-.33	1	4

Source: Fieldwork, 2015

With respect to skewness, the non-managerial employees recorded -.19, while the line managers recorded -.33. These findings indicate that all the respondents tended to agree that managers encouraged employee participation in cross-functional teamwork in the industry. In this way, the HRD function in the sawmill industry becomes one of ensuring integration, collaboration and partnership, which is consistent with the findings of Korte (2011), Krebs (2008), Storberg and Gubbins (2007) and Brooks and Nafukho (2006). These authors have argued that employees live and work within groups, teams, networks, departments, or business units in the organisation. The implication of these findings is that the traditional HRD practice must also focus on the social perspective that embeds HRD more fully in professional work, capable of transforming the traditional workplace into conducive learning environment through social networks, partnerships, collaboration and knowledge sharing.

When data on non-managerial employees were disaggregated with respect to firm types, similar views were expressed by the respondents in both large and medium-scale firms. They had a mean score of 2.77 (skewness = -.48, SD = .77) and 2.51 (skewness = -.03, SD = 1.08) respectively. The respondents in the small-

scale firms, however, did not agree that managers encouraged employee participation in cross-functional teamwork. They scored a mean value of 2.48 (skewness = -.17, SD = 1.12). In the case of the line managers, all respondents agreed that managers encouraged employee participation in cross-functional teamwork. Respondents in the medium-scale firms scored the highest mean value of 3.00, followed by the large-scale firms of 2.67 and the small-scale firm of 2.52. The findings suggest that managers encouraged employee participation in cross-functional teamwork in the industry.

Employees as the Most Valuable Asset of the Organisation

Treating employees as the most valuable asset of the organisation was also measured in relation to promoting social capital in HRD practice of the sawmill industry in Ghana. The results for both line managers and non-managerial employees are presented in Table 15.

Table 15-Treating Employees as the Most Valuable Asset of the Firm

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.80	3.00	3	.99	-.32	1	4
Line managers	2.87	3.00	3	.96	-.42	1	4

Source: Fieldwork, 2015

The mean score of 2.80 (skewness = -.32, median = 3.00), with a standard deviation of .99, shows that the non-managerial employees were highly inclined to agree that managers treated employees as the most valuable asset of the organisation. In the case of the line managers, they even scored a much higher mean score of 2.87 (skewness = -.42, median = 3.00), with a standard deviation of

.96. This finding shows that employees, rather than anything else, form the basis for most organisational decisions in the sawmill industry in Ghana. In this way, it is possible for management and the workforce to unite, collaborate and create good social capital. The finding is also consistent with the conclusions drawn by Storberg (2002). According to Storberg, treating employees as the most strategic resource creates the conditions for flourishing social capital, which, in turn, helps management to realise the full potential of their workforce.

When the data on treating employees as the most valuable asset of the organisation were disaggregated with respect to firm types, there was no significant difference between the views of non-managerial employees and the line managers. In all cases, the mean score was more than 2.50, meaning that the respondents in the large, medium and small-scale sawmill firms agreed that managers treated employees as the most strategic resource of the organisation.

Collaboration Among Firms in the Sawmill Industry

Collaborating with other sawmill firms in the industry was one of the measures used to test the promotion of social capital in HRD practice. The result of the analysis is presented in Table 16.

Table 16-Collaboration with Other Sawmill Firms in the Sawmill Industry

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.59	3.00	2	.92	-.04	1	4
Line managers	2.63	3.00	3	.89	-.17	1	4

Source: Fieldwork, 2015

The non-managerial employees had a mean score of 2.59 (skewness = -.04, median = 3.00), with a standard deviation of .92. The line managers, on the other hand, had a mean score of 2.63 (skewness = -.17, median = 3.00), with a standard deviation of .89. These findings indicate that they both agreed that managers collaborated with other sawmill firms in the industry.

Having examined the composite values, the data were disaggregated with respect to firm types in order to identify any difference in the views expressed by the respondents from the various firms. In the case of the non-managerial employees, there were no significant differences between the views expressed by respondents in the large and small-scale firms. They agreed that managers collaborated with other sawmill firms in the industry. The mean score for the non-managerial staff in the large-scale firms was 2.62 (Skewness = -.03, SD = .90), whereas that of the small-scale firms was 2.67 (Skewness = -.07, SD = 1.07). The non-managerial employees in the medium-scale firms, however, failed to agree. They recorded a mean score of 2.49 (Skewness = -.23, SD = .88).

For the line managers, respondents in the large-scale firms scored the highest mean value of 3.00 (Skewness = -.64, SD = .0). This was followed by those in the medium-scale firms who scored a mean value of 2.74 (Skewness = -.41, SD = .99), and the small-scale firms of 2.52 (Skewness = -.19, SD = .95). Apart from the non-managerial employees in the medium-scale firms, all the findings suggest that managers collaborated with other sawmill firms in the industry. These findings are consistent with those of Wachira (2010) and Krebs (2008) who argue that the scope of contemporary HRD practice is much more

than the accumulation of skills set in the person. In their opinion, the HRD professional in the 21st Century is increasingly required to network and build trusting relationships with others, both within and outside their respective organisations in order to obtain support, resources, information, and knowledge.

Adherence to Mutually Agreed Rules, Norms and Sanctions

Data were also collected on the extent to which managers adhered to mutually agreed or commonly accepted rules, norms and sanctions when taking action against any member. The result of the analysis is presented in Table 17.

Table 17-Adherence to Mutually Agreed Rules, Norms and Sanctions

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.85	3.00	3	.93	-.45	1	4
Line managers	2.82	3.00	3	.93	-.32	1	4

Source: Fieldwork, 2015

As usual, the results in Table 17 suggest that the respondents agreed that managers adhered to mutually agreed or commonly accepted rules, norms and sanctions when taking action against any member. A high mean score of 2.85 (skewness = -.45, median = 3.00) with a standard deviation of .93 for the non-managerial employees and a mean score of 2.82 (skewness = -.32, median = 3.00) with a standard deviation of .93 for line managers, were recorded.

The disaggregation of the data with respect to firm types did not show any significant difference between the two groups and the firm types. In the case of the non-managerial employees, a high mean score of 3.00 was equally recorded by both large and small-scale firms, while the medium-scale firms recorded the

least mean score of 2.66. For the line managers, it was rather the medium-scale firms that recorded a high mean score of 3.00. The large and small-scale firms recorded a mean score of 2.70 and 2.76 respectively. These findings may be interpreted to mean that the management of sawmill firms in Ghana treat their employees with fairness. This can build trust among organisational members and improve the empirical rigor of HRD practice in the industry in such areas as organisational development, organisational learning, organisational change, and leadership development, as submitted by Hatala (2006).

Collective Problem-Solving

Another issue on which data were collected to measure institutional arrangement for promoting social capital in HRD practice in the sawmill industry was whether managers encouraged collective problem-solving among their employees. The results are presented in Table 18.

Table 18-Encouragement of Collective Problem-Solving in the Industry

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.60	3.00	3	.96	-.18	1	4
Line managers	2.81	3.00	3	.87	-.24	1	4

Source: Fieldwork, 2015

The line managers recorded a higher mean score of 2.81 (skewness = -.24, median = 3.00), with a standard deviation of .87, as compared to the non-managerial employees who had a mean score of 2.60 (skewness = -.18, median = 3.00), with a standard deviation of .96. The results suggest that managers encouraged collective problem-solving in the sawmill industry in Ghana. This

practice, in the opinion of Mignone (2009), brings people together from diverse social divisions, allowing for repeated interactions among employees that are essential for developing either cognitive or relational associations (Pearson, Carr & Shaw, 2008). The findings are also consistent with Arregle, Hitt, Sermon and Very's (2007) argument that shared goals and collective problem-solving often lead to shared norms and obligations which enhance feelings of trust and identity.

When the data were disaggregated with respect to firm types in the case of the non-managerial employees, it was found that only the respondents in the large and medium-scale firms agreed that managers encouraged collective problem-solving in their respective firms. They had a mean score of 2.68 (Skewness = -.28, SD = .96) and 2.53 (Skewness = -.09, SD = .98) respectively. The respondents in the small-scale firms failed to agree, recording a mean score of 2.29. For the line managers, all the respondents agreed that managers encouraged collective problem-solving in the industry. The mean scores were: 2.70 (Skewness = -.26, SD = 1.03) for respondents in the large scale firms, 2.97 (Skewness = -.33, SD = .80) for those in the medium-scale firms, and 2.72 (Skewness = -.10, SD = .80) for those in the small scale firms. Thus, there was no significant difference between the views of respondents with respect to both composite and disaggregated data.

Avenue for Work-Related Issues

The institutional arrangement for promoting social capital in HRD practice in the sawmill industry was also measured according to whether managers

provided an avenue for employees to talk on their work-related issues. The results are presented in Table 19.

Table 19-*Provision of Avenue for Work-Related Issues*

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.71	3.00	3	.92	-.21	1	4
Line managers	2.83	3.00	3	.85	-.23	1	4

Source: Fieldwork, 2015

Given a mean score of 2.71 (skewness = -.21, median = 3.00), with a standard deviation of .92 for the non-managerial employees and a mean score of 2.83 (skewness = -.23, median = 3.00), with a standard deviation of .85 for the line managers, it can be inferred that all the respondents agreed that managers provided avenues for employees to talk on their work-related issues.

The data for both line managers and non-managerial employees were further disaggregated in order to compare the views of the various respondents with respect to the type of firm they belonged to. For non-managerial employees, it was found that those in the large and small-scale agreed that managers provided such avenues. They had mean scores of 2.79 (Skewness = -.18, SD = .89) and 2.81 (Skewness = -.38, SD = 1.08) respectively. The non-managerial employees in the medium-scale firms failed to agree. They had a mean score of 2.47 (Skewness = -.30, SD = .88).

For line managers, when the data was further disaggregated with respect to firm types, they all agreed that managers provided avenues for employees to talk on their work-related issues. The line managers in the medium-scale firms highly

agreed that managers provided avenues for employees to talk on their work-related issues. They had a mean score of 3.00 (Skewness = -.51, SD = 0). Line managers in the large and small-scale firms recorded only 2.59 (Skewness = -.31, SD = .84) and 2.76 (Skewness = -.09, SD = .83) respectively.

The results of the study show that almost all the respondents in the study agreed that managers in the industry provided avenues for employees to talk on their work-related issues. This practice allows employees to freely talk about the problems they face in the workplace. The freedom to talk to management about their work-related issues tends to improve organisational performance by allowing individuals to capture, share and apply their collective knowledge (Moliterno & Mahony, 2010). The findings are also consistent with those of Hatala (2008), Flora (2008), and Krebs (2008). According to the authors, the social ties that are created as a result of the freedom to talk to one another can affect individual life outcomes and the capacity of a group to work together for shared goals.

Informing Employees About the Goals and Values of Firms in the Sawmill Industry

The extent to which managers informed employees about the goals and values of the organisation was also used as a measure of institutional arrangement for promoting social capital in HRD practice in the sawmill industry in Ghana. Overall, the line managers tended to agree more on this issue than any other issue

discussed in the study. The results for both line managers and non-managerial employees are presented in Table 20.

Table 20-*Informing Employees About Goals and Values of the Firm*

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.91	3.00	3	.99	-.49	1	4
Line managers	3.17	3.00	4	.86	-.65	1	4

Source: Fieldwork, 2015

As shown in Table 20, the mean score of 2.91 (skewness = -.49, median = 3.00), with a standard deviation of .99, shows that the non-managerial employees were inclined to agree that managers informed employees about the goals and values of the organisation in the sawmill industry in Ghana. Compared to the non-managerial employees, the line managers were highly inclined to agree. They recorded a higher mean score of 3.17 (skewness = -.65, median = 3.00), with a standard deviation of .86. The data from both respondents were disaggregated in order to determine the respective views of the respondents in the three types of firms in the industry. In both cases, the respondents in each firm type tended to agree that managers informed employees about the goals and values of the firm.

For the non-managerial employees, respondents in the small-scale firms registered the highest mean score of 3.00 (Skewness = -.95, SD = .0). They were followed by respondents in the large-scale firms with a mean score of 2.97 (Skewness = -.45, SD = .94) and those in the medium-scale firms who had a mean score of 2.72 (Skewness = -.32, SD = 1.02). In the case of the line managers, at least, a mean score of 3.00 was registered by the respondents. The highest score was registered by respondents in the large-scale firms with a mean score of 3.30

(Skewness = -1.31, SD = .91), followed by those in the medium-scale firms who registered a mean score of 3.06 (Skewness = -.40, SD = .89) and the small-scale firms with a mean score of 3.00 (Skewness = -.33, SD = 0).

These findings suggest that employees in the sawmill industry in Ghana are highly recognised and involved in decision-making. This professional practice promotes collective action and decision-making among all members of the organisation (Flora, 2008). According to Delery and Shaw (2001), such practices serve as talent attraction and retention strategies by positively influencing employee's perception about how they are valued by management. The findings are also consistent with Iles and Yolles (2003) submission that every system is characterised by the interactions of its components, as well as the nonlinearity of those interactions. As noted by Wittek and Agneessens (2011), such systems can effectively deploy existing skills and competencies for maximum achievement.

Dispute and Conflict Resolution in the Sawmill Industry

Resolving disputes and conflicts among employees was considered important in promoting social capital in HRD practice of firms in the sawmill industry in Ghana. Data on dispute resolution was collected from the non-managerial and managerial employees. Overall, the non-managerial respondents tended to agree more on this issue. The results are presented in Table 21. The results in Table 21 suggest that the non-managerial employees had a higher mean score of 3.01 (skewness = -.65, median = 3.00), with a standard deviation of .83, than the line managers who registered a mean score of 3.00 (skewness = -.38,

median = 3.00), with a standard deviation of 0.80. When the data were disaggregated in respect to firm types, the non-managerial respondents in all three firms had an equal mean score of 3.00, with varying degree of skewness, defined as -0.59 for the large-scale, -.070 for the medium-scale and -1.05 for the small-scale firms.

Table 21-Resolution of Disputes and Conflicts Among Employees

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	3.01	3.00	3	.83	-.65	1	4
Line managers	2.99	3.00	4	.80	-.38	1	4

Source: Fieldwork, 2015

For the line managers, respondents in the medium-scale firms registered the highest mean score of 3.09 (Skewness = -.10, SD = .67). They were followed by those in the small-scale firms with 3.00 (Skewness = -.58, SD = 0), and large-scale firms of 2.85 (Skewness = -.17, SD = .82). Thus, in all cases, it was manifested that conflict resolution was strategically addressed by management. This practice, according to Kauffman (1995), promotes peace and unity among members of a group.

Networking with Key Stakeholders in the Sawmill Industry

The ability of management to create strong networks of alliances with competitors, customers and suppliers was also deemed important for measuring the institutional arrangement of top management in promoting social capital in HRD practice of firms in the sawmill industry in Ghana. In this regard, data were

collected from both managerial and non-managerial respondents. The results are presented in Table 22.

Table 22-*Creation of Strong Networks of Alliances with Competitors, Customers and Suppliers*

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.66	3.00	3	.93	-.13	1	4
Line managers	2.70	3.00	2	.84	-.04	1	4

Source: Fieldwork, 2015

Given the mean scores of 2.66 (skewness = -.13, median = 3.00), with a standard deviation of .93, for the non-managerial employees and 2.70 (skewness = -.04, median = 3.00), with a standard deviation of .84, for the line managers, it can be said that both groups agreed that managers created strong networks of alliances with competitors, customers and suppliers in the industry.

When the data were disaggregated with respect to firm types, all the managerial respondents expressed the same view. The respondents in the large-scale firms registered a mean score of 2.89 (Skewness = -.19, SD = .85), followed by those in the medium and small-scale firms who had an equal mean score of 2.62, with varying standard deviations and degree of skewness. In the case of the non-managerial employees, only the respondents in the medium-scale firms failed to agree. They had a mean score of 2.45 (Skewness = -.20, SD = 1.08). The rest had mean scores of 2.73 (Skewness = -.20, SD = .86) and 2.71 (Skewness = -.27, SD = .90) for the large and small-scale firms respectively.

The preceding findings show that the management of firms in the sawmill industry in Ghana have strong networks of alliances with competitors, customers

and suppliers. This practice has some implications for promoting social capital in an organisation. For instance, the social connections between management and competitors can allow a particular organisation to leverage resources, ideas and information beyond the organisational level (Woolcock & Narayan, 2000). The findings are also consistent with Putnam's (2000) submission that a well-connected individual (in this case the firm) is more productive than a poorly connected individual. While going beyond the immediate environment is known to create weak ties, access to other actors, according to Tsai and Ghoshal (1998), enables individuals to identify others with potential resources that they do not have at their own disposal.

The findings also support the submissions of Swanson (2008) that, in order to understand how resources are allocated, an examination of the activities and behaviours of decision-makers, such as consumers, producers, suppliers, and governments, is very important because the external environment either poses threat or provides opportunity to the organisation and its members. In this way, HR professionals are making an extensive use of the general systems perspective by viewing their organisations as open systems that interact with the external environment, rather than concentrating only on the internal forces within the organisation (Swanson & Holton, 2001; Nafukho, 2006).

Annual Social Events in the Sawmill Industry

Organising annual social events was the last issue considered for measuring the institutional arrangement of top management for promoting social

capital in HRD practice of firms in the sawmill industry in Ghana. Both respondents failed to agree that managers organised annual social events in the industry. The results are presented in Table 23.

Table 23-Organisation of Annual Social Events

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.24	2.00	2	1.03	-.32	1	4
Line managers	2.30	2.00	2	1.04	-.22	1	4

Source: Fieldwork, 2015

The mean scores of 2.24 (skewness = -.32, median = 2.00), with a standard deviation of 1.03, for the non-managerial employees and 2.30 (skewness = -.22, median = 2.00), with a standard deviation of 1.04, for the line managers suggest that annual social events were not organised by management in the industry. When the data were disaggregated with respect to firm types, similar views were expressed by all the respondents. In the case of the non-managerial employees, the respondents in the large-scale firms scored a mean value of 2.34 (Skewness = -.17, SD = 1.03), while those in the medium and small-scale firms recorded mean scores of 2.00 (Skewness = -.68, SD = 0) and 2.24 (Skewness = -.50, SD = 1.09) respectively. For the line managers, respondents in the large-scale firms registered the least mean score of 2.22 (Skewness = -.326, SD = .974), followed by those in the medium-scale firms with 2.29 (Skewness = -.21, SD = 1.12) and the small-scale firms with 2.38 (Skewness = -.14, SD = 1.05).

The preceding findings indicate that employees did not interact regularly on social events. This means that the level of inter-personal trust, feelings of responsibility, and the quality of civic engagement that go into social events are

lacking in the sawmill industry in Ghana. This practice does not auger well for the industry because most contemporary businesses now rely on social events to improve communication, awareness and integration of functional groups, as they create the opportunity for a more strategic orientation among employees.

Contribution of Social Capital to HRD Practice in the Sawmill Industry

This section discusses the role social capital plays in HRD practice in the sawmill industry in Ghana. Three areas of interest are discussed: social capital and flow of information in the organisation, social capital and resource exchange, and social capital and support among employees.

Social Capital and Flow of Information in the Organisation

One important issue was discussed under social capital and the flow of information among members in the organisation. This relates to whether formal and informal channels for sharing information among members were established by top management. Data relating to this was collected from both managerial and non-managerial respondents. The results are presented in Table 24

Table 24: *Sharing of Information Among Members*

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.75	3.00	3	.95	-.19	1	4
Line managers	2.84	3.00	3	.91	-.32	1	4

Source: Fieldwork, 2015

The results in Table 24 suggest that line managers tended to agree more than the non-managerial employees that there were established channels for

sharing information among members in the sawmill industry in Ghana. The line managers registered a mean score of 2.84 (skewness = $-.32$, median = 3.00), with a standard deviation of .91, as against non-managerial respondents who had a mean score of 2.75 (Skewness = $-.19$, median = 3.00) and a standard deviation of .945. When the data were disaggregated with respect to firm types, all the respondents agreed that there were established channels for sharing information among members in the industry. For the non-managerial respondents, the highest mean score of 2.77 (Skewness = $-.18$, SD = .91) was registered in the large-scale firms, followed by those in the medium-scale firms with 2.68 (Skewness = $-.15$, SD = 1.05) and small-scale firms with 2.29 (Skewness = $-.26$, SD = .94).

With respect to the line managers, the respondents in both small and medium-scale firms recorded an equal mean score of 2.76 (Skewness = $-.43$, SD = .99) and 2.76 (Skewness = $-.13$, SD = .86) respectively. Respondents in the large-scale firms, however, recorded the highest mean score of 3.04 (Skewness = $-.42$, SD = .98). The findings from both composite and disaggregated analysis suggest that management recognised the importance of information flow among members in the sawmill industry in Ghana.

The preceding findings are consistent with those of Alexopoulos and Monks (2004) who argue that the ability, motivation and opportunity of employees to share knowledge are both the cause and outcome of the cognitive, relational and structural dimensions of social capital. According to these authors, the flow of information among members facilitates the integration and regeneration of otherwise fragmented and asymmetrically distributed knowledge

of the organisation. The findings are also consistent with the suggestions made by Andrews (2009) that the sharing of information among members is crucial as it allows such members to share useful knowledge.

Social Capital and the Exchange of Resources Among Members

The contribution of social capital to HRD practice was also examined in terms of the exchange and combination of resources in the sawmill industry in Ghana. Attention was drawn to the extent to which key resources, such as market trends, sources of supply or issues on product development and innovation, were exchanged and combined in the industry. The results are presented in Table 25.

Table 25-Exchange and Combination of Resources in the Sawmill Industry

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.84	3.00	3	.92	-.32	1	4
Line managers	3.01	3.00	4	.99	-.59	1	4

Source: Fieldwork, 2015

The composite data in Table 25 suggest that the non-managerial employees had a lower mean score of 2.84 (skewness = -.32, median = 3.00), with a standard deviation of .92, than the line managers who registered a higher mean score of 3.01 (skewness = -.59, median = 3.00) with a standard deviation of 0.99. These results show that both groups agreed that members exchanged and combined resources among themselves in the industry.

When the data were disaggregated with respect to firm types, however, only the line managers and majority of the non-managerial employees agreed that members frequently exchanged and combined ideas among themselves. In the

case of the non-managerial employees, while the respondents in the large and medium-scale firms agreed that members frequently exchanged and combined ideas among themselves, the respondents in the small-scale firms failed to agree. The highest mean score was registered by respondents in the large-scale firms. They had a mean score of 3.00 (skewness = $-.65$, $SD = 0.00$). They were followed by respondents in the medium-scale firms who had 2.64 (skewness = $-.28$, $SD = .82$) and those in the small-scale firms who had 2.38 (skewness = $-.19$, $SD = .97$).

For the line managers, all the respondents agreed that members frequently exchanged and combined ideas among themselves. The respondents in the small-scale firms recorded the least mean score of 2.86 (Skewness = $-.48$, $SD = 1.06$). Respondents in both large and medium-scale firms, however, scored the same mean value of 3.00 (Skewness = $-.80$, $SD = 0$) and 3.00 (Skewness = $-.51$, $SD = 0$) respectively. Overall, data from the respondents indicate that resource exchange and combination is very much recognised as being very significant in the industry. These findings are consistent with Todeva and Knoke's (2005) submission that the exchange of ideas among members creates the interdependence between employees, creating new benefits and obligating members to make continuing contributions to other members in the organisation.

The findings are also consistent with the tenets of the social exchange theory which treats the exchange of benefits (ideas) as the most fundamental premise or open secret of human behaviour (Humans, 1961). In justifying this stand, Krebs (2008) argues that contemporary HRD practice does not focus on ownership of resources, but access. According to the author, in today's constantly

changing business environment, competitive advantage does not depend on what you can control but what you can access. The findings of Gubbins and Garavan (2009) are also supported by these findings. In the opinion of these authors, organisational success depends on the ability of employees to access requisite benefits, such as tacit knowledge, information, and explicit ideas.

Social Capital and Support Among Members of the Organisation

A review of the literature has shown that productive resources are scarce to the extent that no person, group, organisation or society has more than enough to produce or consume the goods and services they want (Storberg, 2009; Salopek, 2008). As noted by Styhre (2010), there is no sufficient amount of productive resources held by anyone, and this imposes a variety of constraints on both the choices available to an organisation, and the opportunities open to its members.

Supporting one another improves organisational performance by enabling individuals to capture, share and apply their collective knowledge (Hatala, 2006). Data were, therefore, collected on the extent to which members in the sawmill industry supported each other with their respective skills and knowledge. The results are presented in Table 26.

Table 26-Support Among Employees in the Sawmill Industry

Type of Respondent	Mean	Median	Mode	SD	SK	Min.	Max.
Non-managerial staff	2.81	3.00	3	.87	-.29	1	4
Line managers	2.96	3.00	3	.86	-.35	1	4

Source: Fieldwork, 2015

Mean scores of 2.81 (skewness = $-.29$, median = 3.00), with a standard deviation of $.865$, and 2.96 (skewness = $-.35$, median = 3.00) with a standard deviation of $.86$, were registered by the non-managerial staff and line managers respectively. When the data were disaggregated with respect to firm types, the non-managerial employees in the large-scale firms registered a mean score of 2.95 (Skewness = $-.34$, SD = $.79$). They were followed by the respondents in the small-scale firms who had a mean score of 2.76 (Skewness = $-.26$, SD = $.94$). The respondents in the medium-scale firms, however, failed to agree. They registered a lower than average mean score of 2.49 (Skewness = $-.03$, SD = $.93$).

For the managerial employees, when the data were disaggregated with respect to firm types, all the respondents agreed that members supported each other with their respective skills and knowledge, scoring 2.81 (Skewness = $-.31$, SD = $.38$), 3.00 (Skewness = $-.72$, SD = 0) and 2.83 (Skewness = $-.09$, SD = 1.00) for the respondents in the large, medium and small-scale firms respectively. Overall, the majority of the respondents indicated that members supported each other with their respective skills and knowledge in the sawmill industry in Ghana. These findings show that the various organisational facets strongly interact to produce the desired goods and services, indicating that there is a strong collaboration, social networking, partnership, interaction, and knowledge sharing among the members in the industry (Brooks & Nafukho, 2006).

The findings also show that HRD practice in the sawmill industry in Ghana encompasses many aspects of a social context, such as social ties, trusting relationships and the value systems that facilitate actions of individuals, enabling

individuals to identify others with potential resources that they may not have at their own disposal (Tsai & Ghoshal, 1998). This HRD practice is based on the structural dimension of social capital which is concerned with how organisational members get access to other actors in the organisations. This shows that there is shared vision among members in the industry (Pearson, Carr & Shaw, 2008). It also shows that members have strong feelings for each other.

The study tried to determine whether there were significant differences among the firm types with respect to the four issues, namely: institutional arrangement for promoting social capital in HRD practice; flow of information; resource exchange; and support among members in the industry. The Kruskal-Wallis test was therefore, conducted for both managerial and non-managerial respondents. This test allows one to compare the scores on some continuous variables for three or more groups where the scores are converted to ranks. The basic requirement of the Kruskal-Wallis test is that different subjects/elements/people must be in each of the different groups. The choice for this non-parametric test was based on the fact that respondents indicated their levels of agreement based on their perceptions, which might not reflect the actual situation.

The analysis focused on the composite indexes for institutional arrangement, flow of information, resource exchange, and support. In the case of the line managers, there were no significant differences among the firms with respect to the four key factors or variables. The Chi-Square results were: 1.42 (df = 2, p-value = .49) for institutional arrangement; .94 (df = 2, p-value = .63) for

flow of information; .47 ($df = 2$, $p\text{-value} = .79$) for resource exchange; and 3.47 ($df = 2$, $p\text{-value} = .18$) for support.

In the case of the non-managerial employees, flow of information, resource exchange, and support were viewed similarly across the firm types. A Chi-Square of 1.63 ($df = 2$, $p\text{-value} = .44$) was registered for flow of information, 4.52 ($df = 2$, $p\text{-value} = .10$) for resource exchange and 5.53 ($df = 2$, $p\text{-value} = .06$) for support. However, there were significant differences among non-managerial employees in the different firms with respect to institutional arrangement for promoting social capital in HRD practice. With respect to this factor, non-managerial employees in the large-scale firms had a mean rank score of 98.40 as compared to 95.80 and 74.65 for the small and medium-scale firms respectively. The Chi-Square result was 6.84 at 0.03 significant level ($df = 2$). As the probability ($p = 0.03$) is less than 0.05, it can be concluded that there was a statistically significant difference among the non-managerial respondents with respect to institutional arrangement for promoting social capital in HRD practice.

The results of the study created the need for a further test with respect to the results obtained from the non-managerial respondents in order to identify the pairwise difference between any two of the firms. As a result, the Mann-Whitney U test, with Bonferroni adjustment, was conducted to test for differences between two independent groups on a continuous measure.

As there were three firm types, this required three pairwise comparisons. The alpha 0.05 was, therefore, divided by three to arrive at an adjusted alpha of 0.017 ($0.05/3$). When the data were disaggregated on a pairwise firm type basis, a

Chi-Square of -2.62 ($df = 2$; $p\text{-value} = 0.01$) was obtained for the non-managerial respondents in the large and medium-scale firms with respect to institutional arrangements for promoting social capital in the sawmill industry. As the probability ($p = 0.01$) was less than 0.02, the result suggests that there was a statistically significant difference in the views of the non-managerial respondents in the large and medium-scale firms, with the large-scale firms showing higher institutional arrangement for promoting social capital in the sawmill industry (Mean rank = 87.67) as compared to the medium-scale firms (mean rank of 66.40).

For the remaining three factors, however, there was no statistically significant difference between the respondents in the large and medium-scale firms. The probability value (p) in each case was greater than 0.02.

There was no significant difference in the views expressed by the HRD professionals. For instance, when the HRD professionals were asked to explain the nature of teams that were installed in the industry, and to determine whether employees were encouraged to fully participate in those teams, one interviewee remarked:

Cross-functional teams have always been installed in this organisation. But, as I talk to you, none exists. They were created with unrealistic expectations, and within a few months after they were set-up, they lost momentum, and flagged away.

The preceding response indicates that, while management recognises the collective benefits of social groups arising from the trust, norms, and networks

that can improve the efficiency and coordinated action of members in cross-functional teams (Putnam, 2000), they have done little to sustain the continuous existence of such teams in order to help members develop deeper roots and cohesive relationships that encourages shared values, norms, and trust (Cote & Healey, 2001). The cognitive commitment that predisposes team members to work together for mutual benefits, as submitted by Krishna and Norman (2002), is weak. Despite the realisation that cross-functional teams play a critical role in building a strong social capital for the firm, top management support for teamwork, using institutional support mechanisms, such as mentoring, incentives and performance appraisals, can encourage their development.

The views of the HRD professionals were also sought on whether managers treated their employees as the most valuable asset. In this regard, one interviewee remarked:

For HR departments to operate efficiently and position themselves for future growth, they need people with the right talents, not cash. People are the most strategic assets of a company. They provide sustainable competitive advantage. They bring development, innovations, results, and create profits (Interviewee 7).

Again, this response indicates that there is no significant difference in the views expressed by all the respondents with respect to whether managers treated their employees as the most valuable asset in the organisation.

contribution social capital made to HRD practice in the industry. With regard to institutional arrangements of top management for promoting social capital in the sawmill industry in Ghana, eleven areas were covered. In the area of coordination, all the respondents in the study agreed that managers coordinated the activities of individuals, units and departments. The mean score was almost the same for each firm type: 2.62 (skewness = .02, SD = .92) for the large scale, 2.62 (skewness = -.17, SD = .87) for the medium-scale and 2.57 (skewness = .09, SD = 1.03) for the small-scale firms. The coordination of activities increased employee interaction and encouraged them to share useful resources in the sawmill industry in Ghana.

Managers in the industry encouraged employee participation in cross-functional teamwork. Both line managers and non-managerial employees recorded the same mean value of 2.67 and a median of 3.00. They also scored a standard deviation of .91 and .90 respectively. This practice ensured that employees in the sawmill industry in Ghana lived and worked cordially within various groups, teams, networks, departments and business units, thereby transforming the traditional workplace into a conducive learning environment.

Another area that was examined with respect to institutional arrangements of top management for promoting social capital in the industry was the degree to which management perceived employees as the most valuable asset of the organisation. All the respondents agreed that employees formed the basis for most organisational decisions. While the non-managerial employees had a mean score of 2.80 (skewness = -.32, median = 3.00), and a standard deviation of .99, the

managerial employees scored a much higher mean score of 2.87 (skewness = -.42, median = 3.00), and a standard deviation of .96.

There is a high collaboration among firms in the sawmill industry in Ghana. This practice has helped management to build trusting relationships with other sawmill firms in the industry, thereby allowing management to obtain the needed support from sister organisations. With the exception of the non-managerial employees in the medium-scale firms, all other employees believed that the collaboration with other firms in the industry was the main factor responsible for the flow of information, resources and knowledge among the firms in the industry.

Adherence to mutually agreed or commonly accepted rules, norms and sanctions was next examined. Though the medium-scale firms recorded the least mean score of 2.66, all the other respondents agreed that management adhered to the laid-down rules and regulations when taking action against any employee. This practice allowed management to treat their employees with fairness.

Collective problem-solving was a common feature among employees in the sawmill industry in Ghana. This practice had led to repeated interactions among employees, thereby enhancing feelings of trust and identity. It had also developed the cognitive or relational associations of the employees in the industry. In addition to collective problem-solving, managers provided avenues for employees to talk on their work-related issues. The social ties that were created as a result of this practice had improved the performance of employees as it encouraged individuals to capture, share and apply their collective knowledge.

Managers informed employees about the goals and values of the firms in the sawmill industry in Ghana. They also involved employees in most of the decision-making processes that affected them. This practice had positively influenced the employees' perception about how valuable they were to management. The perceived-value placed on employees had led management to resolving disputes and conflicts among employees. This practice had also promoted peace and unity among employees in the industry. While management had created strong networks of alliances with competitors, customers and suppliers, they had failed to organise annual social events for employees.

The contribution of social capital to HRD practice was manifested in three important areas: flow of information, resource exchange and combination, and support among employees. Top management in the sawmill industry had effectively designed formal communication channels that allow employees to share useful information among themselves. The easy flow of information among members tended to facilitate the integration of the otherwise segregated knowledge from the various units or departments in the industry.

One thing that was very much recognised as being very important in the industry was the exchange and combination of ideas and other important resources, such as market trends, sources of supply or issues on product development and innovation. The exchange and combination of resources had created a strong network of relationships among employees in the industry, allowing them to have access to useful ideas and knowledge. These relationships had further facilitated support among members in the sawmill industry in Ghana.

CHAPTER NINE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the summary, conclusions and recommendations of the study. The chapter is divided into six main segments. The first segment presents a summary of the study in three parts: the main and specific objectives of the study, aspects of the methodology, including the study area, research design, sampling procedures, fieldwork and instrumentation, data processing and analysis, and the main findings of the study. The second segment highlights the various conclusions drawn from the main findings, while the third segment proffers a number of policy recommendations for addressing the integration of social capital into HRD practice in the sawmill industry in Ghana. The limitations of the study are highlighted in the fourth segment, while the fifth segment presents the contributions of the study to both knowledge and practice. The final segment identifies areas for further research.

Summary

The study set out to examine the contribution of social capital to human resource development practice in the sawmill industry in Ghana. To accomplish the general objective, four specific objectives were formulated: to explore the HRD practices of firms in the sawmill industry in Ghana; assess the institutional arrangements of top management for promoting social capital in the sawmill industry; determine the contribution of social capital in relation to information

flow, resource exchange and support among employees in the industry; and recommend policy options and HRD practices for promoting and improving social capital in the sawmill industry in Ghana.

The Ashanti and Western Regions were purposively selected for the study. In addition to being the leading producers of timber in Ghana, the two regions have, at least, one example each of the three categories of sawmills selected for the study. Out of the 35 registered member firms in Ghana, 17 were in the Ashanti Region, while nine firms were in the Western Region. Thus, the two regions covered more than two-thirds of all registered sawmill firms in Ghana.

The study combined both qualitative and quantitative methodologies, underpinned by their respective positivist and interpretive research philosophies. The rationale for using both methods derives from the assertion that social phenomena cannot be fully understood using either purely qualitative or purely quantitative techniques (Tashakkori & Teddie, 2003). The descriptive and exploratory survey designs were adopted for the study. These designs were deemed appropriate because they allow the researcher to observe existing patterns of behaviour, why they occur, and what they imply.

Data were collected from three sets of respondents; the line managers, using survey questionnaires; the non-managerial employees, using interview schedules; and the HR professionals, using an interview guide. The actual data collection was preceded by a pilot study which helped the researcher to refine the instruments. In view of the limited time and resources, 237 non-managerial employees were sampled from the total population of 8,090, following Krejcie

and Morgan's 1970 sample size determination formula. All the 26 human resource professionals and 104 line managers in the study were also included in the overall sample as the size of these populations were considered to be small. The total sample size, therefore, was 367 ($237 + 26 + 104$).

The quantitative data were analysed statistically, using the IBM Statistical Product and Service Solutions (SPSS, Version 18) software. Being a descriptive and exploratory study, both descriptive and inferential statistics were used. The descriptive statistics included the mean, median, mode, and standard deviation. Two inferential statistics, the Kruskal Wallis and Mann-Whitney tests, were used to examine whether differences existed in the issues of concern across small, medium, and large-scale firms that were selected for the study. The choice of the non-parametric test was based on the fact that respondents indicated their levels of agreement based on their perceptions, which are subjective in nature and sometimes may not reflect the actual situation.

The main findings of the study were as follows:

Human resource development practice in the sawmill industry

1. HRD professionals in the large sawmill firms in Ghana preferred internal recruitment to recruiting candidates from outside. Job vacancies were first posted on staff notice-boards, newsletters or the corporate intranet systems to ensure that priority was given to existing employees. For some middle and lower level positions, however, existing employees were given an equal opportunity to compete with external applicants.

2. The HR department played an insignificant role in employee recruitment exercises in most of the small scale firms in the sawmill industry in Ghana. The administrative and employee advocacy roles of the HR manager were exercised by the Chief Executive Officer whose office was synonymous with the HR Head position. When there was a vacancy, the HR department only advertised the position and nominated the candidates for an onward interviewing and selection by the Chief Executive Officer. The selected candidate was then handed over to the HR department for record keeping.
3. The medium scale sawmill firms in Ghana have professionally drafted HR policies with guidelines primarily designed to assist management in ensuring fair recruitment of potential employees for various positions in the industry. However, these were not strictly followed in practice. In most cases, only family members and well-known friends of the owner-manager were recruited.
4. Skill shortage, constant employee-turnover, and the remoteness of the location of most small and medium scale sawmill firms in Ghana were the three main factors that constrained the ability of HRD professionals in attracting and retaining talents in the industry.
5. There were no accommodation facilities on site in the small scale sawmill firms in Ghana. During busy times, employees who worked in the night, due to work schedules, tended to sleep on the corridors of offices of their managers. However, employees who worked at night, over the weekend or general public holidays, received unsocial hour's payments.

6. The small and medium scale sawmill firms are unattractive to professionals, skilled technicians, artisans and other competent individuals. This is due to the remoteness of the location of most of the sawmill firms or the risk involved. Consequently, most of the firms in the industry lacked the competencies needed for a successful and professional HRD practice. Other challenges facing the industry included: obsolete processing technology, distorted market, inadequate infrastructure and logistics.
7. Large scale firms in the sawmill industry in Ghana combined both on-the-job and off-the-job methods in their training programmes. They had well-designed training and development policies that spelt out the need for training, the expected results, the people to be trained and the expected possible consequences. Access to staff training and development in the industry was open to all categories of employees.

Promoting social capital in HRD practice in the sawmill industry

8. Organising annual social events was the least factor for promoting social capital in HRD practice in the sawmill industry. The line managers and non-managerial employees registered low mean scores of 2.30 (Standard deviation = 1.043; Skewness = -0.216) and 2.24 (Standard deviation = 1.031; Skewness = -0.324) respectively.

9. All three categories of respondents agreed that managers coordinated the activities of individuals, units or departments in the sawmill industry in Ghana. The mean scores were almost the same for the non-managerial employees in each firm type: 2.62 (skewness = .022, SD = .923) for the large-scale, 2.62 (skewness = -.171, SD = .874) for the medium-scale and 2.57 (skewness = .093, SD = 1.028) for the small-scale firms. A similar mean score was registered in the case of managerial employees: 3.00 for medium-scale firms, 2.74 for large-scale firms and 2.69 for small-scale firms.
10. Managers encouraged employee participation in cross-functional teamwork in the sawmill industry in Ghana. Both line managers and non-managerial employees in the medium and large-scale firms recorded the same mean value of 2.67 and a median of 3.00. The respondents in the small-scale firms, however, did not agree that managers encouraged employee participation in cross-functional teamwork. They scored a mean value of 2.48.
11. All respondents agreed that employees were the most valuable assets in the sawmill industry in Ghana. As a result, employees, rather than anything else, formed the basis for most organisational decisions in the industry. There were no significant differences between the views of non-managerial employees and the line managers. In all cases, the mean score was more than 2.5.

12. The respondents agreed that firms in the sawmill industry in Ghana had created a very strong network of alliances with competitors, customers and suppliers. Respondents in the large-scale firms registered a mean score of 2.89 (Skewness = -.19, SD = .85), followed by those in the medium and small-scale firms who had an equal mean score of 2.62.
13. The non-managerial employees in the medium-scale firms believed that top management had not provided sufficient avenue for employees to talk about their work-related issues. When the data were disaggregated in order to compare the views of all respondents with respect to the firm type, the non-managerial employees registered a low mean score of 2.47 (Standard deviation = 0.88; Skewness = -0.30).

Contribution of Social Capital to HRD Practice in the Sawmill Industry

14. All the respondents agreed that social capital contributed immensely to the flow of information among members in the sawmill industry in Ghana. The non-managerial employees had a mean score of 2.75 (Skewness = -0.19, SD = 0.95), while the line managers registered a higher mean score 2.84 (Skewness = -0.32, SD = .91). When the data were disaggregated with respect to firm type, the non-managerial employees in the large-scale firms, again registered a high mean score of 2.77 (Skewness = -.18, SD = .91), followed by those in the medium-scale firms with 2.68 (Skewness = -.15, SD = 1.05) and the small-scale firms with 2.29 (Skewness = -.26, SD =

.95). The line managers in both small and medium-scale firms recorded an equal mean score of 2.76 (Skewness = -.43, SD = .99) and 2.76 (Skewness = -.13, SD = .86) respectively, while those in the large-scale firms recorded the highest mean score of 3.04 (Skewness = -.42, SD = 0.90).

15. Product and innovative ideas were exchanged among members in the sawmill industry in Ghana. The respondents in the large-scale firms registered a mean score of 3.00 (Skewness = -.65, SD = 0.00) on this issue, followed by those in the medium-scale firms who had 2.64 (skewness = -.28, SD = .82). However, the respondents in the small-scale firms, failed to agree. They had a mean score of 2.38 (skewness = -.19, SD = .97).

Conclusions

Based on the findings, the following conclusions are drawn:

Firms in the sawmill industry in Ghana do not practice HRD as expected conventionally. For instance, candidates seeking employment apply directly to the Chief Executive Officer which is contrarily to professional HRD practice. Most of the managers in the industry lacked the competencies needed for a successful and professional HRD practice. Majority of them did not understand or apply the ASTD competency models in their HRD practice. Training and development seemed to be the main focus of the practitioners, which according to the ASTD are no longer a sufficient intervention for solving performance problems at the workplace. The problem was more pronounced in the small and medium scale

firms where management did not have HRD policy documents for recruiting, selecting, appraising and developing their staff. Consequently, identifying training and development skill gaps and ways to close them in order to align with individual and organisational goals was virtually absent.

Constant interferences from the Chief Executive Officers in the small and medium-scale firms in the sawmill industry had constrained the ability of HRD professionals to independently perform some critical HRD functions. In most of the companies, the Chief Executive Officer's office was synonymous with the HR Head position. HRD professionals performed three main functions: attracting an effective workforce, developing an effective workforce and maintaining an effective workforce. In performing these functions, the HRD professionals were required to act as strategic partners, administrative experts, employee advocates, and change agents. These functions were designed to match the individuals in an organisation to the organisational tasks. Surprisingly, the administrative and employee advocacy roles were mostly performed by the Chief Executive Officers. The prevailing situation led to low efficiency, high waste, low incomes and poor product quality.

All three categories of respondents in the study had favourable view that top management has made the needed arrangements for promoting social capital in the sawmill industry. For the line managers and non-managerial staff, the mean score on all indicators, except one, were greater than the theoretical mean of 2.5. The arrangements made for promoting social capital in the industry were manifested in eleven areas, namely: coordinating individual, units and

departmental activities; promoting employee participation in cross-functional teamwork; treating employees as the most valuable asset; collaborating with other sawmill firms in the industry; adhering to mutually agreed rules, norms and sanctions; encouraging collective problem-solving; providing avenue for employees to talk on their work-related issues; informing employees about the goals and values of the organisation; resolving disputes and conflicts among employees; promoting networks of alliances with competitors, customers and suppliers; and organising annual social events.

Even though management had demonstrated the desire to integrate social capital into their HRD practice, it had not created the needed conditions for supporting and flourishing the naturally existing social capital. Depending on where a firm was located, a substantial proportion of the workforce came from the local community with common language, values, norms and deeply embedded cultural backgrounds. Consequently, there was little diversity among employees in the industry, creating an opportunity for management to promote strong social ties and trusting working relationships. Unfortunately, the naturally built-in indicators, such as common language, values, attributes and beliefs binding the workforce were not properly used by management to expand the stock of social capital in and outside the firms in the industry.

The contribution of social capital to HRD practice in the sawmill industry in Ghana was evident in areas such as flow of information, resource exchange and support among employees. The contribution of social capital to HRD practice was not limited to the flow of information, resource exchange and support among

employees. It was also demonstrated in other organisational outcomes, such as employee retention, turnover intentions, motivation, and job satisfaction. The exchange of resources and information among members of the organisation created the interdependence between members, thereby improving capacity utilization of existing stock of human resources, a key requirement for organisational development in areas such as innovation, organisational learning and adaptability. The strong inter-personal communication between members in the industry obligated them to make continuing contributions to other members in the organisation.

Recommendations

Based on the findings and conclusions drawn from the study, the following recommendations have been made:

1. The HRD professionals must shift from the traditional HRD practice to a more fluid HRD practice that takes into account the interdependencies and working relationships among members of the industry. A new way of organising and conceptualising the connections between the existing social relationships among employees in the sawmill industry in Ghana is required to leverage the full potential of their most valuable assets, the human resources of the organisation. This new practice, involves the integration of social capital into the HRD practice.
2. The HRD professionals must place much emphasis on performance appraisals, particularly the 360 degrees appraisal method whereby

superiors appraise their subordinates, subordinates appraise their superior, appraisees appraise themselves, and the average of the entire appraisals taken.

3. HRD professionals must use the commonality among employees in the industry to create various networks of social relationships to leverage the full potential of their workforce.
4. In addition to flow of information, resource exchange and support among members, it is also important to factor other outcomes, such as employee retention, turnover intentions, motivation and job satisfaction into the policy for promoting social capital in HRD practice in the industry.
5. Management of firms in the sawmill industry must provide their HRD professionals with an opportunity to acquire specific HRD competencies through additional learning and work experience. The HRD professionals must also be encouraged by their employers to apply the ASTD models in their HRD practice, as this practice allows them to stay current in the field of HRD.
6. Line managers of firms in the sawmill industry must ensure that their HRD professionals are given the requisite authority and autonomy by their employers to perform their duties. The Chief Executive Officers must note that such interferences can result in confusion between ideals and reality, thereby discrediting the professional performance of the HRD professional which can, in turn, affect the performance of the organisation as a whole. It is more useful for the Chief Executive Officer to take a realistic view of

what the HRD professional can do, as this allows top management to measure the contribution of HRD professionals without any ambiguity.

7. Top management must use the commonality among employees to create various networks of social relationships to leverage the full potential of their workforce. This responsibility may be shared among the line managers, top management and the HRD professionals in the industry.

Limitations of the Study

This study was conducted to examine the integration of social capital in the human resource development practice of firms in the sawmill industry in Ghana. The study did not consider in detail, the other forms of capital, namely; the natural, physical, human and financial capitals. Furthermore, while the social capital and human resource development concepts are very broad and general in scope, only some selected aspects of these concepts, as specified in the scope of the study, were considered relevant to the study.

The study covered a small population of HRD professionals, line managers, and non-managerial employees from selected firms in the sawmill industry in Ghana. From the Ghana Timber Millers Organisation (GTMO), there were 35 registered sawmill firms in Ghana. However, only 26 firms in the Ashanti and Western Regions were selected for the study.

Finally, three categories of sawmill firms were included in the study, namely: the export-focused companies, which are usually large-scale sawmills owned by foreign investors and export at least 80 percent of their timber products

to foreign markets; the logging contracting firms which operate medium sawmills owned and run by local proprietors whose major function is to harvest the logs from the forest and sell them to the export-focussed companies; and the domestic market companies which are usually small Ghanaian owned sawmills, timber traders and furniture makers that feed the domestic market. The study did not include other firms that may not be completely classified into any of the three categories of sawmill firms.

Contribution to Knowledge and Practice

A review of the literature on social capital and HRD practice has shown that all the studies that investigated the interconnectivity of these variables at the organisational level relied heavily on desk analysis of literature available on the internet (e.g. PRO QUEST, EBSCO, WebSPRIS, PSYCHINFO and INGENTA). No attempt was made to empirically collect data in order to establish the proposition that social capital improves the empirical rigor of HRD in critical areas, such as organisational development, organisational learning, leadership development, and organisational change.

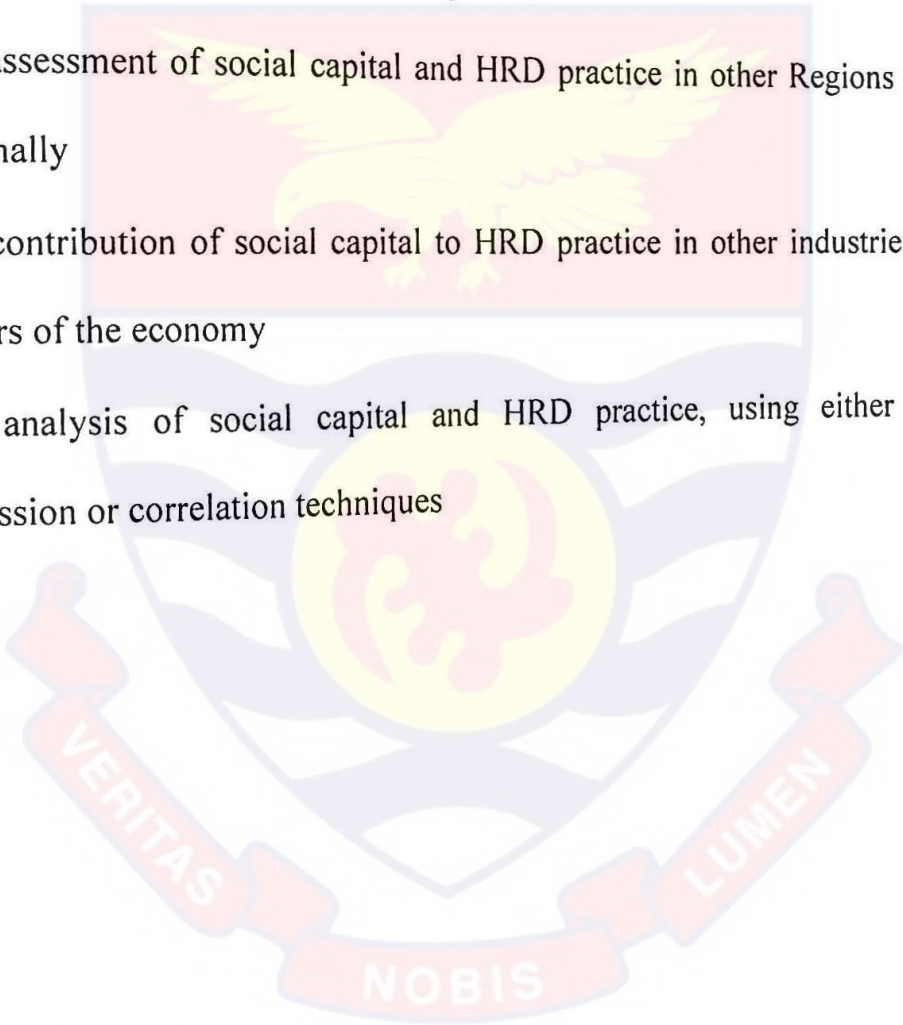
The main contribution of this study, therefore, is the collection of primary data for analysing the relationship between social capital and human resource development practice. While not discrediting the significance of previous studies that focused mainly on literature search, the collection of primary data through both qualitative and quantitative processes, has helped one to empirically establish the understanding of the relationship between social capital and HRD

practice, not only in the data collection processes but also in the analysis of the data.

Areas for Future Research

Based on the findings, conclusions and limitations of the study, further research could be conducted in the following areas:

- The assessment of social capital and HRD practice in other Regions and nationally
- The contribution of social capital to HRD practice in other industries or sectors of the economy
- The analysis of social capital and HRD practice, using either the regression or correlation techniques



REFERENCES

- Abdullah, H.A, Musa, F.R., & Ali, H.J. (2011). The development of human resource practitioner competency model perceived by Malaysian human resource practitioners and consultants: A structural equation model (SEM) approach. *International Journal of Business and Management*, 6(11), 240 – 255.
- Achaempong, E., & Marfo, E. (2011). Estimating the number of jobs created by chainsaw activities in Ghana. *Ghana Journal of Forestry*, 27(3), 1 – 11.
- Adeyeye, V. A. (1991). *Group farming in Oyo State, Nigeria: A comparison of male and female participants*. Nigerian Institute for Social and Economic Research (NISER) Monograph Series No. 5 NISER, Ibadan, pp. 47-58.
- Adhikari, K. P., & Goldey, P. (2009). Social capital and its “downside”: The impact on sustainability of induced community-based organizations in Nepal. *World Development*, 38(2), 184 - 194.
- Adjargo, G. (2012). Social capital: An indispensable resource in Ghana. *Journal of Sustainable Development in Africa*. 14, 219 – 227.
- Adler, P.S., Kwon, S. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27(1), 17 – 40.
- Aguenza, B. B., & Mat-Som, A. P. (2012). A conceptual analysis of social networking and its impact on employee productivity. *Journal of Business and Management*, 1 48 – 52.
- Agyeman, V. K., Agyeman, F. & Kyere, B. (2004). Illegal chainsaw operations: Impact, constraints, challenges and policy reforms. In Tropenbos

Proceedings 2. Tropenbos International, Wageningen, the Netherlands.

Agyeman, V. K., Oduro, K. A., & Gyan, K. (2007). *Review of existing policy and legislative documents on definition of timber legality in Ghana*. VLTP Background paper No. 4. Validation of legal timber program. Forestry Commission, Ghana, Accra.

Ahmad, R. & Bujang, S. (2013). Issues and challenges in the practice of performance appraisal activities in the 21st century. *International Journal of Education and Research*, 1(4), 7 – 19.

Akapbio, A. I. (2008). Significant predictors of social capital in farmers organisations in Akwa Ibom, Nigeria. *Journal of International Social Research*, 1(3), 61 – 68.

Alavi, M. & Carlson, P. (1992). A review of MIS research and disciplinary development. *Journal of Management Information System*, 8(4), 45 – 56.

Alesina A., & Ferrara E. (2000). Participation in heterogeneous communities. *The Quarterly Journal of Economics*, 115(3), 847 - 904.

Alexopoulos, A., & Monks, K. (2004). *A social capital perspective on the role of human resources practices in intra-organisational knowledge sharing*. Paper submitted to the 5th International Conference on HRD Research and Practice across Europe. Dublin: Ireland.

Amir, D. (1999). *Complete business statistics* (4th). Boston: Irwin McGraw-Hill.

- Andrews, R. (2009). Civic engagement, ethnic heterogeneity, and social capital in urban areas: Evidence from England. *Urban Affairs Review*, 44(3), 428 – 439.
- Anthony, W., Kacmar, K., & Perrewe, P. (2002). *Human resource management: A strategic approach* (4th ed.). New York: South-Western.
- Antwi, K. B., & Analoui, F. (2008). Reforming public sector: Facing challenges of effective human resources development policy in Ghana. *Journal of Management Development*, 27, 600 – 612.
- Appiah-Kubi, E., Adom-Asamoah, M., Frimpong-Mensah, K., & Tekpetey, L. (2011). Capacity of sawmills and carpentry workshops for processing lesser-used species in Ghana. *Ghana Journal of Forestry*, 27(3), 63 – 70.
- Appiah-Kubi, E., Kankam, C., & Adom-Asamoah, M. (2012). Bending and modulus of elasticity properties of ten lesser-used timber species in Ghana, using structural dimensions. *Ghana Journal of Forestry*, 28(1), 15 – 28.
- Arneson, M., Rothwell, W.J. & Naughton, J. (2013). *The 2013 ASTD training and development redefined model*. Alexandria, VA: American Society for Training and Development.
- Arregle, J.L, Hit, M.A., Sermon, D.J., & Very, P. (2007). The development of organisational social capital: Attributes of family firms. *Journal of Management Studies*, 44(1), 73.
- Ayarkwa, J. (1998). *New marketable Ghanaian timber species for furniture and construction*. Wood news, Ghana, Accra.

Ayarkwa, J. (2009). *Timber technology for researchers, polytechnics and university students*. Classic Graphic Print, Kumasi. ISBN 4526944710028.

Babbie, E. (2007). *The practice of social research: International student edition* (11th ed.). Australia: Wadsworth Cengage Learning.

Baiden, B. K., Badu, E., & Menz, F. S. (2005). Exploring the barriers to the use and potential of timber for housing and construction in Ghana. *Construction and Building Materials*, 19(5), 347 – 352.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Barney, J. (2001). Resource-based theories of competitive advantage: A ten year retrospective on the resource-based view. *Journal of Management*, 27, 643 – 650.

Bartunek, J.M., Moch, M.K., (1987). First-order, second-order, and third-order change and organisation development interventions: A cognitive approach. *Journal of Applied Behavioral Science*, 23, 483 - 500.

Baskerville, L., & Myers, M. (2009). Fashion waves in information systems research and practice. *Management Information System Quarterly*, 33 (4).

Bateman, S. T., & Snell, A. S. (1999). *Management: Building competitive advantage*, (4th ed.) New York, NY: McGraw-Hill.

Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, LXX, 9 – 49.

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. New York: National Bureau of Economic Research.

Bernthal, P.R., Colteryahn, K., Davis, P., Naughton, J., Rothwell, W.J., & Wellins, R. (2004). *ASTD competency study: Mapping the future*. Alexandria, VA: American Society for Training and Development.

Birikorang, G., Okai, R., Asenso-Okyere, K., Afrane, S., & Robinson, G. (2001). *Ghana wood industry and log export ban study*. Forestry Commission, Ghana, Accra.

Blaikie, N. (2000). *Designing social research: The logic of anticipation*. Cambridge: Polity Press.

Blake, R. R. (1995). Memories of HRD. *Training and Development*, 49, 22 – 28.

Bohlander, G., Snell, S., & Sherman, A. (2001). *Managing human resources* (12th ed.). Australia: South-Western College Publishing.

Bonsi, R., Hammett, A. L., & Ametsitsi, G. (2011). Assessing the current situation of Ghana's forest products industry. *Ghana Journal of Forestry*, 27(3), 1 – 14.

Boon, A., Ahenkan, A., & Baduon, B. N. (May 2009). *An assessment of forest resources policy and management in Ghana*. IAIA09 Conference Proceedings', Impact assessment and human well-being, 29th Annual Conference of the International Association for Impact Assessment, Accra International Conference Centre, Accra, Ghana.

Bourdieu, P. (1986). The forms of capital. In J. Richardson (ed.), *Handbook of theory and research for the sociology of education* (pp. 241 – 258). New York, NY: Greenwood Press.

Bourdieu, P., & Wacquant, J. D. (1992). *An invitation to a reflexive sociology*. Chicago: The University of Chicago Press.

Bowles, S., & Gintis, H. (2002). Social capital and community governance. *The Economic Journal*, 112, 419 - 436.

Brautigam, D. (1997). Substituting for the state: Institutions and industrial development in Eastern Nigeria. *World Development*, 25, 1063 – 1080.

Brenya, N. (2005). *The role of community forest committees in forest management*. Dissertation, Faculty of Renewable Natural Resources, Kwame Nkrumah University of Science and Technology, Ghana.

Brooks, K., & Nafukho, F. M. (2006). Human resource development, social capital, and emotional intelligence: Any link to productivity? *Journal of European Industrial Training*, 30(2), 117 – 128.

Bryman, A. (2004). *Quantity and quality in social research* (2nd ed.). London: Routledge.

Bryman, A., & Bell, E. (2007). *Business research methods* (2nd ed.). Oxford: Oxford University Press.

Bui, N. Y. (2009). *How to write a master's thesis*. New Delhi: Sage Publications, Inc.

- Burt, R. (1992). *Structural holes: The social structure of competition*. Cambridge: Harvard University Press.
- Burt, R., Hogarth, R. M., & Michaud, C. (2000). The social capital of French and American managers. *Organisation Science*, 11, 123 – 147.
- Campbell, J. P. (1990). Modelling the performance prediction problem in industrial and organisational psychology. In M. D. Dunnette, & L. M. Hough (Eds), *Handbook of industrial and organizational psychology* (2nd ed.). Palo Alto, CA: Consulting Psychology Press.
- Candace, J., & Hamilton, V. E. (2010). Organisational identification: Extending our understanding of social identities through social networks. *Journal of Organisational Behaviour*, 3, 413 – 434.
- Casper, S. (2000). *Social capital and rural development: A discussion of issues*. Paper presented at the World Bank conference on social development, family, environmentally and socially sustainable development. Geneva: Switzerland.
- Castle, E. N. (2002). Social capital: An interdisciplinary concept. *Rural Sociology*, 67(3), 331 – 349.
- Chaskin, R. J., Goerge, R. M., Skyles, A., Gultinan, S. (2006). Measuring social capital: An exploration in community-research partnership. *Journal of Community Psychology*, 34(4), 489 – 514.
- Chelladurai, P. (2006). *Human resource management in sport and recreation* (2nd ed.). Champaign: Human Kinetics.

Application of the ASTD WLP competency model. *International Journal of Training and Development*, 9(1), 21 – 32.

Chen, S. J. (2008). The adoption of human resource strategies in a confucian context. *Advances in International Management*, 21, 145 – 169.

Clark, J. H. (1989). *Organisation development: concept, process, and applications in the department of defense*. Special Projects Office Brooks Air Force Base, Texas.

Cochran, W.G. (1963). *Sampling techniques* (2nd ed.). New York: John Willey and sons, Inc.

Cohen, D., & Prusak, L. (2001). *In good company: How social capital makes organisations work*. Cambridge, Mass: Harvard usiness School Pres.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. (6th ed.) New York, NY: Routledge.

Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, 95 – 120.

Coleman, J. S. (1990). *Foundations of social theory*. Cambridge: Harvard University Press.

Comte, A. (1970). *Introduction to positive philosophy*. Indianapolis, Ind: Bobbs-Merrill.

Cotes, S. & Healy, T. (2001). *The Well-being of nations: The role of human and Social Capital*. Organisation for Economic Co-operation and Development, Paris.

- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). C. A. Sage: Thousand Oaks.
- Creswell, J. W., & Clarke, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oak, CA: Sage.
- Cromie, S. (1992). Networking by female business owners in Northern Ireland. *Journal of Business Venturing*, 7(3), 237 - 251.
- De Cieri, H., & Kramar, R. (2008). *Human resource management in Australia: Strategy people performance* (3rd ed.). Sydney: McGraw Hill Australia Pty Limited.
- Delery, J. Shaw, J. (2001). The strategic management of people in work organisations: Review, synthesis and extension. *Research in Personnel and Human Resource Management*, 20, 165 - 197.
- Dempwolf, C., & Lyles, W. (2012). The uses of social networks analysis in planning: A review of the literature. *Journal of Planning Literature*, 27, 3 - 21.
- DeNisi, A. S., & Griffin, W. R. (2001). *Human resources management*. Boston: Houghton Mifflin Company.
- Denscombe, M. (2007). *The good research guide: for small-scale social research projects*. Buckingham: Open University Press.
- Dessler G. (2005). *Human resource management* (10th Ed). Pearson Prentice Hall.USA.
- Dilworth, L. (2003). Searching for the future of HRD. *Advances in Developing Human Resources*, 5, 10 - 13.

- Jomegan, C. & Fleming, D. (2007). *Marketing research in Ireland: Theory and practice* (3rd). Gill and MacMillan.
- Donavan, L. L., & Marsick, V. J. (2000). Trends in the literature: A comparative analysis of the 1998 HRD research. In K. P. Kuchinke (Ed.), *2000 Conference proceedings of the academy of human resource development* (Section 40 – 42), Baton Rouge, LA.
- Edvinsson, L., & Sullivan, P. H. (1996). Developing a model for managing intellectual capital. *European Management Journal*, 14, 356 – 364.
- Evans, P. (1992). The state as problem and solution: Predation, embedded autonomy and structural change. In H. Stephan, & R. Kaufman (Eds.). *The politics of economic adjustment: International constraints, distributive conflict and the state* (pp. 139 – 181) Princeton, N.J: Princeton University Press.
- Evans, P. (1995). *Embedded autonomy: State and industrial transformation*. Princeton N.J: Princeton University Press.
- Fafchamps, M. (1996). The enforcement of commercial contracts in Ghana. *World Development*, 24(3), 427 – 448.
- Fenwick, T. J. (2005). Conceptions of critical human resource development: Dilemmas of theory and practice. *Human Resource Development International*, 8(2), 225 – 238.
- Fine, B. (2001). *Social capital versus social theory: Political economy and social science at the turn of the millennium*. London: Routledge.

- Fine, B., & Lapavistas, C. (2004). Social capital and the capitalist economies. *South Eastern Europe Journal of Economics*, 1, 17 – 34.
- Fischer (2005). Bowling alone: What's the Score? *Social Networks*, 27(2), 155-167.
- Fletcher, C. (2001). Performance appraisal and management: The developing research agenda. *Journal of Occupational and Organisational Psychology*, 73, 473 – 487.
- Flora, C. B. (2008). Social capital and community problem solving: Combining local and scientific knowledge to fight invasive species. *International Journal of Learning in Social Contexts*, 42 – 54.
- Fowler, F. J. (1993). *Survey research methods* (2nd Ed). Newbury Park, CA: Sage Publications Inc.
- Fukuyama, F. (1995). *Trust: The social creation virtues and the creation of prosperity*. New York: Free Press.
- Gall, M., Borg, W., & Gall, J. (1996). *Educational research: An introduction*. White Plains NY: Longman.
- Gambin, L., C. Hasluck, & Hogarth, T. (2010). Recouping the costs of apprenticeship training: Employer case study evidence from England. *Empirical Research in Vocational Education and Training*, 2(2), 127–146.
- Gant, J., Ichniowski, C., & Shaw, K. (2002). Social capital and organisational change in high-involvement and traditional work organisations. *Journal of Economics and Management Strategy*, 11(2), 289 – 328.

Ghana Forestry Commission (2009). *FLEGT Voluntary Partnership Agreement between Ghana and the European Union*. Briefing Note November 9.

Ghana Forestry Commission (2011). *Publications, industry and trade – Timber Industry Development Division*. Report on export of wood products in 2010, Ghana, Accra.

Ghana Statistical Service (2002). *2000 population and housing census*. Accra: Medialite Co.

Ghana Timber Millers Organisation (2014). Annual report on Timber operation in Ghana, Accra.

Gilley, A., Gilley, J. W., & Heather, S. M. (2009). Organisational change: Motivation, communication and leadership effectiveness. *International Society for Performance Improvement*, 21(4), 75 – 94.

Gilley, J.W., & Gilley, A. M. (2003). *Strategically integrated HRD: Six transformational roles in creating results-driven programmes* (2nd edition), Cambridge, MA: Perseus.

Gilley, J.W., Quatro, S. A., & Lynham, A.S. (2003). Strategic HRD and its transformation. In A.M. Gilley, J. Callahan, & L. Bierema (Eds.), *Critical issues in HRD: A new agenda for the twenty-first century* (pp. 23 – 48). Cambridge, MA: Perseus.

Glaeser, A. (2005). An ontology for ethnographic analysis of social processes: Extending the extended case method. *Social Analysis*, 49(3), 16 – 45.

Glaeser, A. & Goddard, R. D. (2003). Relational networks, social trust, and norms: A social capital perspective on students' chances of academic success', *Educational Evaluation and Policy Analysis*, 25(1), 59 – 74.

- Goetsch, D.L. (2005). *Occupational safety and health for technologists, engineers, and managers*. (5th. ed.) New Jersey: Pearson Prentice Hall.
- Granovetter, S. M. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360 – 1380.
- Granovetter, S. M. (1974). *Getting a job: A study of contacts and careers*. Cambridge: Harvard University Press.
- Grootaert, C. (1996). *Social capital: The missing link?* Paper presented at a meeting on social capital initiative, The World Bank, Washington D. C.
- Grootaert, C., & Bastelaer, T. (2001). *Understanding measuring social capital: Social capital initiative* Working Paper No. 24. The World Bank.
- Grosser, T., Kidwell-Loparz, V. & Labianca, G. (2010). A social network of positive and negative gossip in organisational life. *Group and Organisations Management*, 35, 177 – 214.
- Guba, E. G. (1990). Carrying on the dialogue. In E. G. Guba (ed.). *The paradigm dialogue* (pp. 368 – 378). Newbury Park: CA. Sage.
- Guba, E. G. & Lincoln, Y.S. (1994). Competing paradigm in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.). *Handbook of qualitative research* (pp. 105 – 117). Thousand Oak, CA: Sage.
- Gubbins, M. C., & Garavan, N. T. (2005). Studying HRD Practitioners: A social capital model. *Human Resource Development Review*, 4, 189 – 218.
- Gubbins, M. C., & Garavan, N. T. (2009). Understanding the HRD role in MNCs: The imperatives of social capital and networking. *Human Resource Development Review*, 8(2), 245 – 275.

- Guest, D. (1987). Human resource management and industrial relations. *Journal of Management Studies*, 24, 503 – 521.
- Gupte, M., & Eliassi-Rad, T. (2012). *Measuring tie strength in implicit networks*. Paper presented at a meeting of the 3rd Annual ACM Web Science Conference, New York, NY.
- Gyamfi, A. A. (2013). *Practical approach to sawmill production in Ghana*. Alfred Adu Gyamfi Publications, Kumasi, Ghana.
- Hair, J., Anderson, R. E., & Tatham, R. L. (1987). *Multivariate data analysis with readings* (2nd ed.). London, Collier Macmillan.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis*. Upper Saddle River: Prentice-Hall.
- Halpern, D. (2009). *The hidden wealth of nations*. Cambridge: Polity.
- Hanifan, L. J. (1916). The rural school community centre. *Annals of the American Academy of Political and Social Sciences*, 67, 130 – 138.
- Hansenn, M.T. (1999). The search-transfer problem: The role of weak ties in sharing knowledge across organisational subunits. *Administrative Science Quarterly*, 44(1), 82 – 111.
- Harbison, F., & Myers, C. A. (1964). *Education, manpower, and economic growth: Strategies of human resource development*. New York: McGraw-Hill.
- Harrison, R., & Kessels, J. (2004). *Human resource development in the knowledge economy: An organisational view*, London: Palgrave Macmillan.

- Haslinda, A. (2009). Evolving terms of human resource management and development. *Journal of International Social Research*, 2(9), 180 – 186.
- Hatala, J. P. (2006). Social network analysis in human resource development: A new methodology. *Human Resource Development Review*, 5, 45 – 71.
- Haythornthwaite, C. (2005). Social networks and internet connectivity effects. *Information, Communication and Sociology*, 125 – 147.
- Haythornthwaite, C., & Kendall, L. (2010). Internet and community. *American Behavioral Scientist*, 53(8), 1083 - 1094.
- Henry, G. T. (1990). *Practical sampling*. Newbury Park, CA: Sage Publications Inc.
- Homans, G. C. (1961). *Social behavior: Its elementary forms*. New York: Brace and World.
- Hopkins, A. (2011). Risk-management and rule-compliance: Descision-making in hazardous industries. *Safety Science*, 49, 110-120.
- Horwitz, F. M., Bowmaker-Falconer, A., & Searll, P. (1996). Human resource development and managing diversity in South Africa. *International Journal of Manpower*, 17(4/5), 134 – 151.
- Ibarra, H., Kilduff, M., & Tsai, W. (2005). Zooming in and out: Individuals and collectivities at the new frontiers for organizational network research. *Organisation Science*, 4, 359 – 371.
- International Labour Office (2007). Report of the Director-General. Eleventh African Regional Meeting, Addis Ababa.

- Iles, P. A. & Yolles, M. (2003). *International HRD alliances in viable knowledge migration: The czech academic link project*. *Human Resource Development International*, 6, 301 – 324.
- Ingles, A. W., Musch, A. & Qist-Hoffmann, H. (1999). *The participatory process for supporting collaborative management of natural resources: An overview*. Rome: FAO.
- Jacobs, J. (1961). *The death and life of great American cities*. New York: Random House.
- Jacobs, R. L. (2003). *Structured on-the-job training: Unleashing employee expertise in the workplace*. San Francisco: Berrett-Koehler.
- Johnson, B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14 – 26.
- Kapucu, N. (2011). Social capital and civic engagement. *International Journal of Social Inquiry*, 4(1), 23 – 43.
- Katerina, V., Andrea, S., & Gabriela, K. (2013). Identification of employee performance appraisal methods in agricultural organisations. *Journal of Competitiveness*, 5(2), 20 – 36.
- Katz, N., Lazer, D., Arrow, H., & Noshir, C. (2004). Network theory and small groups. *Small Group Research*, 35, 307 – 332.
- Kauffman, S. (1995). *At home in the universe: The search for the laws of self-organisation and complexity*. New York: Oxford University Press.

- Kessels, W. M. J., & Poell, R. F. (2004). Andragogy and Social Capital Theory: The implications for human resource development. *Advances in Developing Human Resources*, X, 1 – 12.
- Klyver, K., & Terjesen, S. (2007). Entrepreneurial network composition: An analysis across venture development stage and gender. *Women in Management Review*, 22(8), 682 - 688.
- Knowles, M.S. (1980). How do you get people to be self-directed learners? *Training and Development*, 34, 5, 96-99.
- Konan, A. (2010). *The HRD competencies as perceived by the human resource development professionals in banks in Cote D' Ivoire*. Unpublished doctoral dissertation, College of Graduate and Professional Studies, Indiana State University, Terre Haute, Indiana.
- Korte, R. (2011). Exploring the social foundations of human resource development: A theoretical framework for research and practice. *Human Resource Development Review*, xx(x), 1 – 25.
- Kotler, P. & Pfoertsch, W. (2010). *B2B brand management*. Springer. Berlin.
- Krause, J., Croft, D. P., & James, R. (2007). Social network theory in the behavioural sciences: Potential applications. *Behavioural Ecology and Sociobiology*, 62, 15 – 27.
- Krebs, V. (2008). Social capital: The key to success for the 21st Century organisation. *IHRIM Journal*, XII, 38 – 42.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607 – 610.

- Krishna, A., & Norman, N. (2002). Mapping and measuring social capital through assessment collective action to conserve and develop watersheds in Rajasthan, India. In C. Grootaert, & V. T. Bastlaer (Eds). *The role of social capital in development: An empirical assessment* (p. 204 - 218), Cambridge: Cambridge University Press.
- Kritsotakis, G., & Gamarnikow, E. (2004). What is social capital and how does it relate to health? *International Journal of Nursing Studies*, 41, 43 – 50.
- Lane, L. M., & Wolf, J. F. (1990). *The human resource crisis in the public sector: Rebuilding the capacity to govern*. New York: Quorum Books.
- Lebedys, A. (2004). *Trends and current status of the contribution of the forestry sector to national economies*. FAO Working Paper FFSM/ACC/07. FAO, Rome.
- Lee, M. (2001). A refusal to define HRD. *Human Resource Development International*, 4, 327 – 341.
- Leedy, D. P., & Ormrod, J. E. (2010). *Practical research: Planning and design* (9th ed.). Boston: Pearson Education International.
- Lerman, R. I. (2013). *Skill development in middle level occupations: The role of apprenticeship training*. IZA Policy Paper No. 61.
- Li, Y., Pickles, A., & Savage, M. (2005). Social capital and social trust in Britain. *European Sociological Review*, 21(2), 109 – 123.
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 22, 28 – 51.

- Loscocco, K., Monnat, S. M., Moore, G., & Lauber, K. B. (2009). Enterprising women: A comparison of women's and men's small business networks. *Gender and Society*, 23(3), 388 - 411.
- Lowndes, V. (2004). Getting on or getting by? Women, social capital and political participation, *BJPIR*, 6, 45 – 64.
- Macke, J., & Kunrath, E. D, (2010). Social capital dimensions in collaborative networks: The role of linking social capital. *International Journal of Social Inquiry*, 3, 121 – 136.
- Mamoria, C.B. (1995). *Personnel management*. Himalaya Publishing House. New Delhi.
- Mansuri, G., & Rao, V. (2004). Community-based and-driven development: A critical review. *The World Bank Research Observer*, 19(1), 1 - 39.
- Marfo, E. (2004). Coping with illegality: Conflicts over chainsaw lumbering and coping strategies. In K. S. Nketiah, A Wieman & K. O . Asubonteng (eds), *Chainsaw lumber production, a necessary evil?* Tropenbos International Workshop Proceedings 2, Ghana, Accra.
- Marfo, E. (2009). *Security of tenure and community benefits under collaborative forest management arrangements in Ghana: A country Report*, CSIR-INSTI, Accra.
- McGoldrick, J., Stewart, J., & Watson, S. (2001). Theorising human resource development. *Human Resource Development International*, 4, 343 – 356.
- McLagan, P.A. (1989). *Models for HRD practice*. American Society for Training and Development, Alexandria, VA: ASTD Press.

- McLagan, P., & McCullough, R. (1983). *Models for excellence: The conclusions and recommendations of the ASTD training and development competency study*. Alexandria, VA: American Society for Training and Development.
- McLean, G. N., & McLean, L. D. (2001). If we can't define HRD in one country, how can we define it in an international context? *Human Resource Development International*, 4, 313 – 326.
- Mello, J. A. (2002). *Strategic human resource management*. Cincinnati, Ohio: South-Western Thomson Learning.
- Mignone, J. (2009). Social capital and aboriginal communities: A critical assessment. *The Journal of Aboriginal Health*, 5, 100 – 147.
- Milkovich, G., Gerhart, B., & Hannon, J. (1991). The effects of research and development intensity on managerial compensation in large organizations. *The Journal of High Technology Management Research*, 2(1), 133-150.
- Misnan, M.S. & Mohammed, A.H. (2007). *Development of safety culture in the construction industry: A strategic framework*. Conference on sustainable building, South East Asia.
- Mohrenweiser, J., and T. Zwick (2009). "Why do firms train apprentices? The net cost puzzle reconsidered." *Labour Economics* 16(6), 631–637.
- Moliterno, T. P., & Mahony, D. M. (2011). Network theory of organisation: A multilevel approach. *Journal of Management*, 37, 443 – 467.

- Morgan, S. L. (2000). Social capital, capital goods and the production of learning. *Journal of Socio-Economics*, 29, 591- 595.
- Moynihan, D. P., & Pandey, S. K. (2007). The ties that bind: Social networks, person-organisation value fit, and turnover intension. *Journal of Public Administration Research and Theory*, 18, 205 – 227.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. *Academy of Management Review*, 23, 242 – 266.
- Neuman, W. L. (2004). *Basics of social research: Qualitative and quantitative approaches*. Boston: Pearson Education, Inc.
- Nicoleta, F. V. (2011). Using branding to attract, recruit, and retain talented staff. *Management and Marketing*, IX, 284 – 297.
- Nie, N. H., Junn, J. & Stehlik-Barry, K. (1996). *Education and democratic citizenship in America*. Chicago: University of Chicago Press.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- Obiri, B., & Oteng-Amoako, A. (2007). Towards sustainable development of the bamboo industry in Ghana. *Ghana Journal of Forestry*, 21(4), 14 – 27.
- Obisi, C. (2011). Employee training and development in Nigerian organisaitons: Some observations and agenda for research. *Australian Journal of Business and Management Research*, 1 (9), 82 – 91.

- Odoom, D., & Vlosky, R. P. (2010). *A strategic overview of the forest sector in Ghana*. Louisiana Forest Products Development Center. Working Paper No. 81, Baton Rouge, LA 70808.
- Oduro, K. A., Marfo, E., Agyeman, V. K., & Gyan, K. (2011). One hundred years of forestry in Ghana: A review of policy and regulatory discourses on timber legality. *Ghana Journal of Forestry*, 27(3), 15 – 32.
- Offe, C. & Fuchs, S. (2002). *A decline of social capital? The German case in democracies in Flux: The evolution of social capital in contemporary society*. Oxford University Press, Oxford.
- Ofori, D., & Sackey, J. (2010). Assessing social capital for organisational performance: Initial exploratory insights from Ghana. *Organisations and Markets in Emerging Economies*, 1, 71 – 91.
- Oh, H., Chung, M., & Labianca, G. (2004). Group social capital and group effectiveness: The role of informal socialising ties. *Academy of Management Journal*, 47(6), 860 – 875.
- Olive, L., & Alan, C. (1996). *Strategic human resource management*. Australia: Thomsom.
- Ongori, H. & Nzonzo, C.J. (2011). Training and development practices in an organisation: An intervention to enhance organisational effectiveness. *International Journal of Engineering and Management Science*, 2 (4), 187 – 198.
- Opie, C. (2004). *Doing your educational research: A guide for first time researchers*. London: SAGE Publications.

- Osei-Tutu, P. (2011). Local people's participation in forest management: The place of Ghana's Community Forest Committee (CFC) Approach. *Ghana Journal of Forestry*, 27(3), 45 – 62.
- Osei-Tutu, P., Nketiah, K., Kyereh, B., Owusu-Ansah, N., & Faniyan, J. (2010). *Hidden forestry revealed: Characteristics, constraints and opportunities for small and medium forest enterprises in Ghana*. IIED Small and Medium Forest Enterprise Series No. 27. Tropenbos International and International Institute for Environment and Development, London, U.K.
- Oteng-Amoakoh, A. A., Odoom, F. K., Birikorang, G., Ghartey, K. P., Boateng-Poku, O. K., Bitar, G., Cardoso, R., Kwofie, S. H., & Opoku, F. R. (2008). *Voluntary Partnership Agreement*. Final report of the Timber industry restructuring group, Ghana, Accra.
- Otoo, J. (2004). Chainsaw lumber production and sustainable forest management. In Nketiah, K. S., Wieman, A., & Asubonteng, K. O. (eds). *Chainsaw lumber production: A necessary evil?* Tropenbos International. Workshop proceedings No. 2. Tropenbos International, Wageningen, the Netherlands.
- Owusu, A. (2004). Halting chainsaw lumber production: counting the cost. In Tropenbos International. *Chainsaw lumber production: a necessary evil?* Workshop Proceedings 2. Tropenbos International, Wageningen, the Netherlands.
- Owusu, F. W., Appiah, J. K., Damnyag, L., & Blay, D. (2011). *Extraction and processing of trees on farmlands and logging residues: Volumes of trees*

and lumber produced. Report on processing and utilisation of trees on farmlands and logging residues through collaboration with local communities. PD431/06 Rev. 1(1).

Owusu, F. W., Ayarkwa, J., & Frimpong-Mensah, K. (2012). Sanding properties of seven lesser-used timber species in Ghana. *Ghana Journal of Forestry*, 28(1), 1 – 14.

Parts, E. (2009). Social capital, its determinants and relations with economic growth: Comparison of the Western European and Central and Eastern European countries. PhD dissertation, University of Tartu, 293p.

Passmore, D. L. (1997). Ways of seeing: Disciplinary bases of research in HRD. In R. A. Swanson & F. Holton, III (Eds). *Human resource development research handbook* (pp. 114 – 137), San Francisco: Berrett-Koehler.

Paulus, W. (2009). *The Ghanaian timber industry and the voluntary partnership agreement: A research on the opinion of the Ghanaian exporting timber industry on the VPA*. Paper presented at a national workshop organised by Tropenbos International, Kumasi, Ghana.

Pearson, A. W., Carr, J. C., & Shaw, J. C. (2008). Towards a theory of familiness: A social capital perspective. *Entrepreneurship Theory and Practice*, 32(2), 949 – 969.

Peerapornvitoon, M. (1999). *A survey of workplace learning and performance: Competencies and roles for practitioners in Thailand*. Unpublished doctoral dissertation, the Pennsylvania State University, University Park.

- Phillips, J. J. (1996). ROI: The search for best practices. *Training and Development*, 50(2), 42-47.
- Pinto, P.R. & Walker, J.W. (1978). *A study of professional training and development roles and competencies*. Washington, DC: American Society for Training and Development.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1 – 24.
- Pretty, J. (2003). Social capital and collective management of resources. *Science*, 302, 1912 – 1914.
- Punch, K. F. (2005). *Introduction to social research: Quantitative and qualitative approaches* (2nd ed.). London: Sage Publications Inc.
- Putnam, R. D. (1993). The prosperous community: Social capital and public life. *The American Prospect*, 13, 35 – 42.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.
- Rhee, M. (2004). Network updating and exploratory learning environment. *Journal of Management Studies*, 41(6), 933 – 949.
- Ridenour, C., & Neuman, I. (2008). *Mixed methods research: Exploring the interactive continuum*. Carbondale, IL: Illinois University Press.

Rose, R. (2000). How much does social capital add to individual health? A survey study of Russians. *Science and Medicine*, 51(9), 1421 – 1435.

Rothwell, W.J. (1996). *ASTD models for human performance improvement*. Alexandria, VA: American Society for Training and Development.

Rothwell, W., Sanders, E., & Soper, J. (1999). *Models for workplace learning and performance: Roles, competencies and outputs*. Alexandria, VA: ASTD Press.

Rowold, J. (2008). Multiple effects of human resource development interventions. *Journal of European Industrial Training*, 32(1), 32 – 54.

Ryan, T., & Sagas, M. (2009). Relationships between pay satisfaction, work-family conflict, and coaching turnover intentions. *Team Performance Management*, 15(3/4), 128-140.

Sabatini, F. (2008). Social capital and the quality of economic development. *Kyklos*, 61(3), 466 – 499.

Salopek, J. J. (2008). Keeping it real. *Training and Development*, 62, 42 – 47.

Saru, E (2007). Organisational learning and HRD: How appropriate are they for small firms? *Journal of European Industrial Training*, 30(1), 36.

Schiff, M. (1992). Social capital, labour mobility, and welfare. *Rationality and Society*, 4, 157 – 175.

- Schuler, R., & Rogovsky, N. (1998). Understanding compensation practice variations across firms: The impact of national culture. *Journal of International Business Studies*, 29(1), 159-177.
- Schuller, T. (2007). Reflections on the use social capital: Organisation for economic cooperation and development (OECD). *Review of Social Economy*, 65(1).
- Sekaran, U. (2005). *Research methods for business: A skill-building approach* (4th ed.). NY: John-Wiley & Sons.
- Selden, S., & Moynihan, D. (2000). A model of voluntary turnover in state government. *Review of Public Personnel Administration*, 20(2), 63-74.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organisation*. New York: Doubleday.
- Serageldin, I. (1996). Sustainability as opportunity and problem of social capital. *The Brown Journal of World Affairs*, 3, 187 – 203.
- Sharma, K. L. (2008). Public sector downsizing in the Cook Island: Some experience and lessons. *South Pacific Studies*, 28, 69 – 85.
- Sims R. R. (2006). *Human resource development: Today and tomorrow*. Information Age Publishing Inc. (USA).
- Siqueira, A. C. O (2007). Entrepreneurship and ethnicity: The role of human capital and family social capital. *Journal of Developmental Entrepreneurship*, 12(1), 31 – 46.
- Son, J., & Lin, N. (2008). Social capital and civic action: A network-based approach, *Social Science Research*, 37, 330 - 349.

- Stam, W., & Elfringe, T. (2008). Entrepreneurial orientation and new venture performance: The moderating role of intra and extraindustry social capital. *Academy of Management Journal*, 51(1), 97 – 111.
- Stavrou-Costea, E. (2005). The challenges of human resource management towards organisational effectiveness: A comparative study in Southern EU. *Journal of European Industrial Training*, 29(2/3), 112 – 136.
- Storberg, J. (2002). The evolution of capital theory: A critique of a theory of social capital and implications for HRD. *Human Resource Development Review*, 1(4), 468 – 499.
- Storberg, J. (2009). Heterodox economics, social capital, and HRD: Moving beyond the limits of the neoclassical paradigm. *Human Resource Development Review*, 1(8), 97 – 119.
- Storberg, J., & Gubblins, C. (2007). Social networks as a conceptual and empirical tool to understand and do HRD. *Advances in Developing Human Resources*, 9(3), 291 – 311.
- Styhre, L. (2010). *Capacity utilisation in short sea shipping*. Unpublished doctor of philosophy Thesis, Chalmers University of Technology, Sweden.
- Sutton, J., & Kpentey, B. (2012). *An enterprise map of Ghana*. Houghton Street: London, International Growth Centre.
- Swanson, R. A. (2008). Economic foundation of human resource development: Advancing the theory and practice of the discipline. *Advances in Developing Human Resources*, 10, 763 – 769.

- Swanson, R. A., & Holton, E. F. (2001). *Foundations of human resource development*. San Francisco: Berrett- Koehler.
- Tabachnick, B. G., & Fidell, S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn and Bacon.
- Tashakkori, A. & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. London: Sage.
- Tashakkori, A. & Teddlie, C. (2010). *Handbook of mixed in social and behavioural research* (2nd ed.). London: Sage Publication.
- Taylor, S. (2010) *Resourcing and talent management*, Chartered Institute of Personnel and Development: London.
- Teodorescu, T. (2006). Competence verses competency: What is the difference? *Performance Improvement*, 45(10), 27 – 32.
- Thai, V. V., & Grewal, D. (2007). The Maritime Security Management System: Perception of the International Shipping Community. *Journal of Maritime Economics and Logistics*, 9, 119-137.
- Thurow, L. (1993). *Head to head: The coming economic battle among Japan, Europe, and America*, New York: Warner books.
- TIDD (1998). *Norms and regulations for operations of timber processing firms*. TIDD, Forestry Commission, Ghana, Accra.
- TIDD/FORIG (2009). *Ghana domestic timber market study*. Final report of the Timber Industry Development Division and Forestry Research Institute. Commissioned under Natural Resources and Environmental Governance Program, Ghana, Accra.

- Todeva, E., & Knoke, D. (2005). Strategic alliances and models of collaboration. *Management Decision*, 43, 123 – 148.
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, 4, 356 – 367.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intra-firm networks. *Academy of Management Journal*, 41, 464 – 476.
- Tseng, C.C. & McLean, G.N. (2008). Strategic HRD practices as key factors in organisational learning. *Journal of European Industrial Training*, 32(6), 418 – 432.
- Turnbull, S. (2002). Brocolage as an alternative approach to human resource development theory building. *Human Resource Development Review*, 1(1), 111 – 128.
- United Nations Development Programme (UNDP) (1997). *Capacity development*. Paper presented at a meeting of the UNDP Management Development and Governance Division, Geneva.
- Van, A. H. (1989). The buzzing, booming and confusing world of organisation and management. *Journal of Management Inquiry*, 8(2), 118 – 125.
- Vemic, J. (2007). Employee training and development and the learning organisation. *Economics and Organisation*, 4 (2), 209 – 216.
- Vince, R. (2003). The future practice of HRD. *Human Resource Development International*, 6(4), 559 – 563.

- Vredenburg, A.G. (2002). Organizational safety: Which management practices are most effective in reducing employee injury rates? *Journal of Safety Research*, 33, 259 – 276.
- Wachira, F. N. (2010). *Making the elephant dance: HRD challenges and responses in Africa*. Paper presented on the 14th Public Sector Trainers Conference: The International Convention Centre, East London.
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge: Cambridge University Press.
- Watkins, K. E. (1989). Business and strategy. In S. B. Merriam & P. M. Cunningham (Eds.). *Handbook of adult and continuing education* (PP. 422 – 435). San Francisco: Jossey-Bass.
- Watkins, K. E., & Marsick, V. J. (1995). The case for learning. In E. Holton (Ed), *Academy of human resource development*. Conference Proceedings (pp. 1 – 7). Austin, TX: Academy of Human Resource Development.
- Webb, C. (2008). Measuring social capital and knowledge networks. *Journal of Knowledge Management*, 12(5), 65 – 78.
- Wen, Y. (1998). Capacity utilisation under increasing returns to scale. *Journal of Economic Theory*, 81, 7 – 36.
- Wiesinger, G. (2007). The importance of social capital in rural development, networking and decision-making in rural areas. *Journal of Alpine Research*, 95, 43 – 56.
- Williamson, I. P., Rajabifard, A., & Enemark, S. (2003). *Capacity building for SDIs*. Paper presented at a meeting of the Centre for Spatial Data

Infrastructures and Land Administration, Victoria: University of Melbourne.

Witteck, R., & Agneessens, F. (2011). Where do intra-organisational advice relations come from? The role of informal status and social capital in social exchange. *Social Networks*, 333 – 345.

Woolcock, M. (2001). The place of social capital in understanding social and economic outcomes. *ISUMA Canadian Journal of Policy Research*, 2(1), 11 – 17.

Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer*, 15, 225 – 249.

Yang, J.C. (1994). *Perceived competencies needed by HRD managers in Korea*. Unpublished doctoral dissertation, University of Minnesota, Town cities.

Yin, R. (2003). *Case study research: Design and methods* (3rd). Thousand Oak, CA: Sage.

Yuan, Y. C., & Gay, G. (2006). Homophily of network ties and bonding and bridging social capital in computer-mediated distributed teams. *Journal of Computer-Mediated Communication*, 11, 1062 – 1084.

Yuan, Y. C., Gay, G., & Hembrooke, H. (2006). Focused activities and the development of social capital in a distributed learning community. *The Information Society*, 22, 25 – 39.

Zafirovski, M. (2005). Social exchange theory under scrutiny: A positive critique of its economic-behaviourist formulations. *Electronic Journal of Sociology*, ISSN: 1198 3655.

Zikmund, W. G. (2003). *Business research methods* (7th ed.). Cincinnati, OH: Thomson.



APPENDIX 1

INTERVIEW GUIDE FOR HR PROFESSIONALS

SECTION A: Background Information of Respondents

Sex: Male ☐ Female ☐

Highest qualification: Masters ☐ First degree ☐ HND ☐ Others ☐

Age: Up to 20 ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ Above 60 ☐

Length of serviceyears

Name of company.....

Type of company: Small scale ☐ Medium scale ☐ Large scale ☐

Location: Ashanti Region ☐ Western Region ☐

SECTION B: HRD Practices in the Sawmill Industry

- (i) Actions taken to attract potential employees for the company
- (ii) Recruitment and selection practices of the company
- (iii) Measures taken to retain your human resources
- (iv) Opportunities for training and developing employees
- (v) Performance appraisal strategies carried out in the company
- (vi) Ensuring employee health and safety in the company

SECTION C: Institutional Arrangements for Promoting Social Capital in HRD Practice in the Sawmill Industry in Ghana

Social capital is a relational resource that resides in social relationships comprising social networks that facilitates the actions of members and allows

© University of Cape Coast <https://ir.ucc.edu.gh/xmlui>
them to rely on the reciprocity of exchange of resources, knowledge, information and support.

To what extent do you perform the following social network functions?

1. Coordinating individual, units and departmental activities
2. Promoting employee participation in cross-functional teamwork
3. Treating employees as the most valuable assets in the organisation
4. Collaborating with other sawmill firms in the industry
5. Adhering to mutually agreed or commonly accepted rules and norms
6. Encouraging collaborative problem solving
7. Organising annual social events
8. Supporting employees to acquire social networking skills
9. Providing avenue for employees to talk on their work-related issues
10. Informing employees about the goals and values of the organisation
11. Using conflict resolution mechanisms to build internal relationships

SECTION D: Contribution of Social Capital to HRD Practice in the Sawmill

Industry in Ghana

Social capital contributes to HRD practice in a variety of ways. What can you say about social capital in relation to:

1. Flow of information among members?
2. Resource exchange and combination?
3. Support among members?

Thank you

APPENDIX 2

SURVEY QUESTIONNAIRE FOR LINE MANAGERS

Introduction

This survey is designed to gather information on the contribution of social capital to human resource development practice in the sawmill industry in Ghana. By this survey questionnaire, you are invited to share your views on the issues under investigation. Your participation is voluntary, and your responses are required for purely academic purposes.

Thank you for your time and effort.

SECTION A: Background Characteristics of Respondents

- Sex: Male ☐ Female ☐
- Qualification: Masters Degree ☐ Bachelors degree ☐ HND ☐ Others ☐
- Age: Up to 40 ☐ 41- 60 ☐ Above 60 ☐
- Length of service: 1 – 4 ☐, 5 – 9 ☐, 10 – 14 ☐, 15 – 19 ☐, 20 and above ☐
- Name of company.....
- Type of company: Small scale ☐ Medium scale ☐ Large scale ☐
- Location: Ashanti Region ☐ Western Region ☐

SECTION B: Social Capital in the Sawmill Industry in Ghana

INSTRUCTION: Tick the appropriate column. The columns are on a scale of 1 – 4, with 1 showing Least Agree (LA), 2 showing Agree (A), 3 showing Highly Agree (HA) and 4 showing Totally Agree (TA).

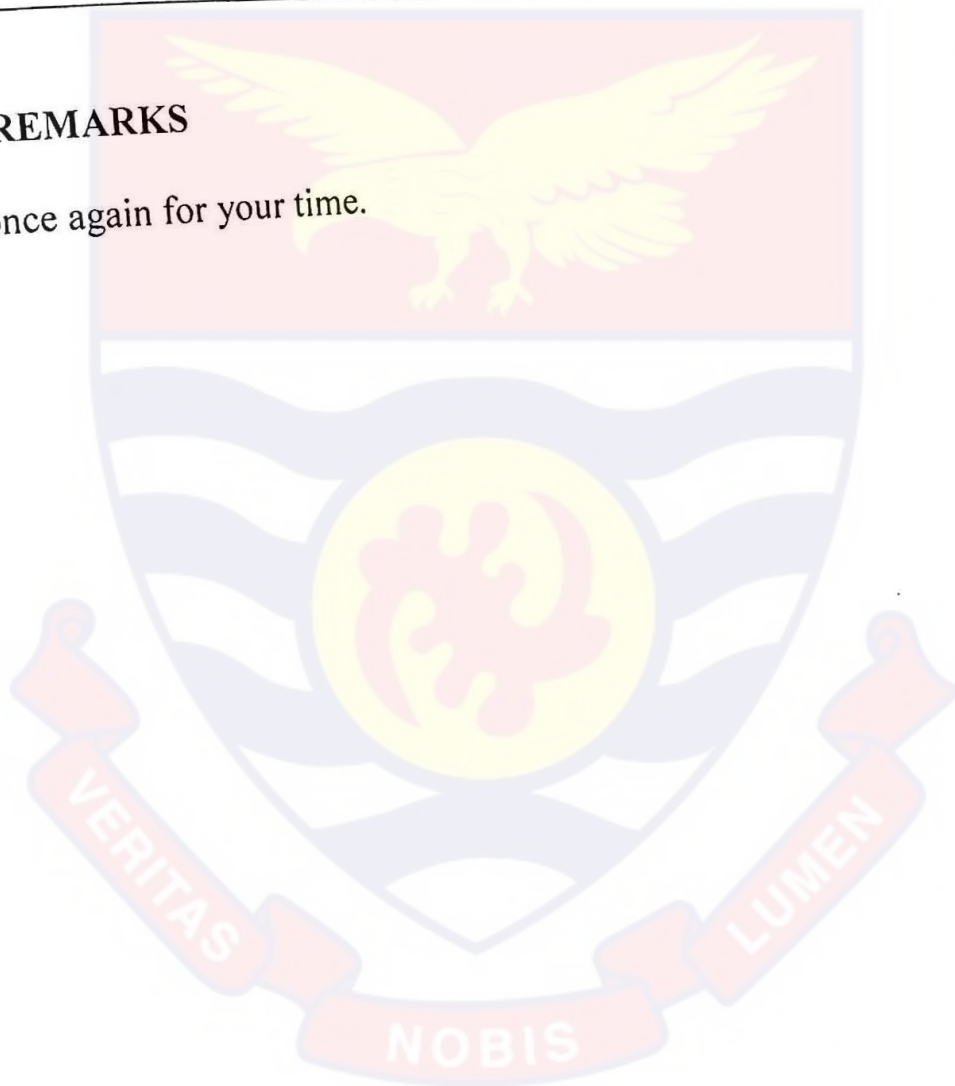
(a) Institutional arrangements for promoting social capital in the sawmill industry	1	2	3	4
Your response to these items will indicate the extent to which social networking is promoted in your organisation				
1. We coordinate the activities of individuals, units and departments in this organisation				
2. We promote employee participation in cross-functional teamwork				
3. We treat employees as the most valuable assets of the organisation by paying attention to their needs and expectations				
4. We collaborate with other sawmill firms in the industry				
5. We adhere to mutually agreed or commonly accepted rules, norms and sanctions when taking any action against any member				
6. We measure performance and provide collective rewards				
7. We organise annual social events				
8. We provide avenue for employees to talk on their work-related issues and tensions				
9. We inform employees about the goals and values of the organisation				

10. We resolve disputes and conflicts among employees				
11. We promote networks of alliances with competitors, customers and suppliers				
(b) Flow of information among Line Managers Your response to these items will indicate the extent to which information flow from one member to another in your company				
12. We have both formal and informal frameworks for sharing information among members in this company				
13. Employees always engage in open and honest conversation with one another				
14. Employees in this organisation have no hidden agenda or issues				
(c) Resource exchange among Line Managers Your response to these items will indicate the extent to which resources are exchanged and combined in your organisation				
15. We frequently exchange important ideas (such as market trends, sources of supply or issues on product development and innovation among one another in this company				
16. We offer any product or service to other individuals, units or departments when the need arises				
17. Members in my department have frequently been sent to other departments to work on joint projects				
(d) Support among Line Managers Your response to these items will indicate the extent to				

which members support one another in your organisation				
18. Members of this organisation support each other with their respective skills and knowledge				
19. Members of this organisation build on each other's ideas in order to achieve the best possible outcome				

CLOSING REMARKS

Thank you once again for your time.



APPENDIX 3

INTERVIEW SCHEDULE FOR NON-MANAGERIAL EMPLOYEES

INTRODUCTION

This survey is designed to gather information about the contribution of social capital to human resource development practice in the sawmill industry in Ghana. By this survey questionnaire, you are invited to share your views on the issues under investigation. Your participation is voluntary, and your responses are required for purely academic purposes.

Thank you in advance for your time and effort.

SECTION A: Background Characteristics of Respondents

Sex: Male ☐ Female ☐

Highest qualification: Bachelor's degree ☐ HND ☐ SHS ☐ Others ☐

Age: Up to 20 ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ Above 60 ☐

Length of serviceyears

Name of company.....

Type of company: Small-scale ☐ Medium-scale ☐ Large-scale ☐

Location: Ashanti Region ☐ Western Region ☐

SECTION B: Social Capital in the Sawmill Industry in Ghana

INSTRUCTION: Tick the appropriate column. The columns are on a scale of 1 – 4, with 1 showing Least Agree (LA), 2 showing Agree (A), 3 showing Highly Agree (HA) and 4 showing Totally Agree (TA).

(a) Institutional arrangements for promoting social capital in the sawmill industry Your response to these items will indicate the contribution of management in promoting social networking among employees in your organisation	1	2	3	4
1. In this organisation, managers coordinate the activities of individuals, units and departments				
2. In this organisation, managers promote employee participation in cross-functional teamwork				
3. In this organisation, managers treat employees as the most valuable assets by paying attention to their needs and expectations				
4. In this organisation, managers collaborate with other sawmill firms in the industry				
5. In this organisation, managers adhere to mutually agreed or commonly accepted rules, norms and sanctions when taking any action against any member				
6. In this organisation, managers measure performance and provide collective rewards				
7. In this organisation, managers organise annual social events				
8. In this organisation, managers provide avenue for employees to talk on their work-related issues and tensions				

9. In this organisation, managers inform employees about the goals and values of the organisation				
10. In this organisation, managers resolve disputes and conflicts among employees				
11. In this organisation, managers promote networks of alliances with competitors, customers and suppliers				
(b) Flow of information among employees Your response to these items will indicate the extent to which information flow from one employee to another in your company				
12. We have both formal and informal frameworks for sharing information among one another in this company				
13. We in this organisation have no hidden agenda				
(c) Resource exchange among employees Your response to these items indicate the extent to which resources are exchanged in your organisation				
14. We frequently exchange important ideas (such as market trends, sources of supply or issues on product development and innovation among one another in this company				
15. We offer any product or service to other individuals, units or departments when the need arises				
(d) Support among employees Your response to these items will indicate the extent to which employees support one another				
16. Employees of this organisation support each				

other with their respective skills and knowledge				
17. Employees of this organisation build on each other's ideas in order to achieve the best possible outcome				

CLOSING REMARKS

Thank you once again for your time.

