

**DETERMINANTS OF WOMEN PARTICIPATION IN BUILDING AND
CONSTRUCTION INDUSTRY IN CENTRAL DIVISION, ISIOLO COUNTY,
KENYA**

BY

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DECLARATION

I declare that this research project is my original work and has not been submitted for a degree in any other university or college for examination or academic purposes.

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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this project to my husband Norman, my children Emma, Julie and Josiah for their continued support during the entire period of study.

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ABBREVIATIONS AND ACRONYMS

CEDAW - Convention on the Elimination of all Forms of Discrimination against Women

GAD - Gender and Development

ILO - International Labour Organization

NGEC - National Gender and Equality Commission

NGO - Non-governmental organization

UN - United Nations

UNECE - United Nations Economic Commission for Europe

UNRSD- United Nations Research Institute for Social Development

ABSTRACT

Participation of women in building and construction can promote women's ability to negotiate and influence policy in favour of women's and possibly children's needs thus reducing poverty. Without civic education, citizens will not know how they can influence the direction of the changes they would like to see in their localities. Without engagement of women in civic education it is difficult for women to influence other women to participate in building and construction. The main purpose of this study was to establish the determinants of women participation in the construction industry with special reference to Central Division Isiolo County. The study was guided by the following objectives: to establish economic factors, social cultural factors, societal factors, attitude and demographic factors on the participation of women in the building and construction industry in Central Division Isiolo County. The study was grounded on community development theory, role congruity theory, gender and development and agency theory. The study adopted a descriptive research design. The target population for this study composed the community leaders, project managers, religious leaders and project committee leaders, Garba Tula Sub County. The sample size for the proposed study consists of 172 community leaders, project managers, religious leaders and project committee leaders, Garba Tula Sub County, drawn from the target population. The study selected the respondents using stratified proportionate random sampling technique. Primary data was obtained using self-administered questionnaires. The drop and pick method was preferred for questionnaire administration so as to give respondents enough time to give well thought out responses. After data cleaning which entails checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the quantitative variables and information presented in form of tables. The qualitative data from the open-ended questions were analyzed using conceptual content analysis and presented in prose. Multiple regressions was used because it is the procedure that uses two or more independent variables to predict a dependent variable. The study found that economic factors, social cultural factors, societal factors, women's attitude and demographic factors influence women participation in building and construction industry greatly. The study concluded that economic factors had the greatest effect on the participation of women in building and construction industry, followed by societal factors then women's attitude then social cultural factors while demographic factors had the least effect to the participation of women in building and construction industry. The study recommends that the Government of Kenya should promote women participation in building and construction industry through enacting laws that specifically address women participation in building and construction industry, that the families should continue supporting women initiatives to be part of buildings and construction industry and also respond positively to the women proposal to participate directly or indirectly in the buildings and construction activities and that the local communities should also embrace women's effort to participate in the in building and construction industry at the community level by giving women a chance to be selected as workers and also building and construction project managers.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Participation refers to the simple demographic representation of particular groups in society. Representatives are assumed to share the values, attitudes, and socioeconomic characteristics of those they represent and in a sense they are mirrors of the larger population. This form of representation is descriptive or mirror representation. Nominal participation would assume that only women brought forward concerns related to their gender and/or those women may restrict their contributions to such concerns. Effective participation requires that participants are active and engaged in building and construction industry. An assessment of effective participation would consider the rules of decision making such as whether a process is viewed as accessible, transparent, fair and consistent with existing laws, regulations or policies. It might also consider the attributes of individuals such as their knowledge of particular issues, their ability to mobilize resources and their comfort in speaking out on particular issues. Thus, effective participation involves assessing the ability of members to enhance the equity and efficiency of decisions and to advance their goals (Ara, 2016).

Effective participation also gives consideration to how power operates within the processes and the influence of power on the capacity of individuals and groups to advance their interests. Biases can be subtle, almost invisible, and yet, they can influence effective participation. They can emerge in procedures that determine selection criteria and processes identify sources and relevance of data, value alternative experiences and knowledge, set the location and timing of meetings and payments for attendance and provide level and type of agency support from government for the process. Nominal participation is linked to effective participation, particularly where participating groups are minorities. Among Scandinavian women politicians, once women became a significant majority (passing a threshold of some 30% seats in Parliament or local councils), there was less stereotyping and open exclusionary practices by men, a less aggressive tone in discussions, a greater accommodation of family obligations in setting meeting times and a greater weight given to women's concerns in policy formulation (Blaydes & Tarouty, 2009).

Women participation in building and construction industry implies active involvement of women in project planning, decision making and implementation of the projects. Women participate through community-based organization and sponsored by self-help groups, government, non-governmental organization, and other financial institution and constituency development projects. This is influenced by various factors such as culture, level of education, family responsibilities and resources. According to United Nations report (1999) women are half world's population, yet they do two third of the world's work, earn one – tenth of the world's income and own less than one hundredths of the world's properties (UNRSD, 2010).

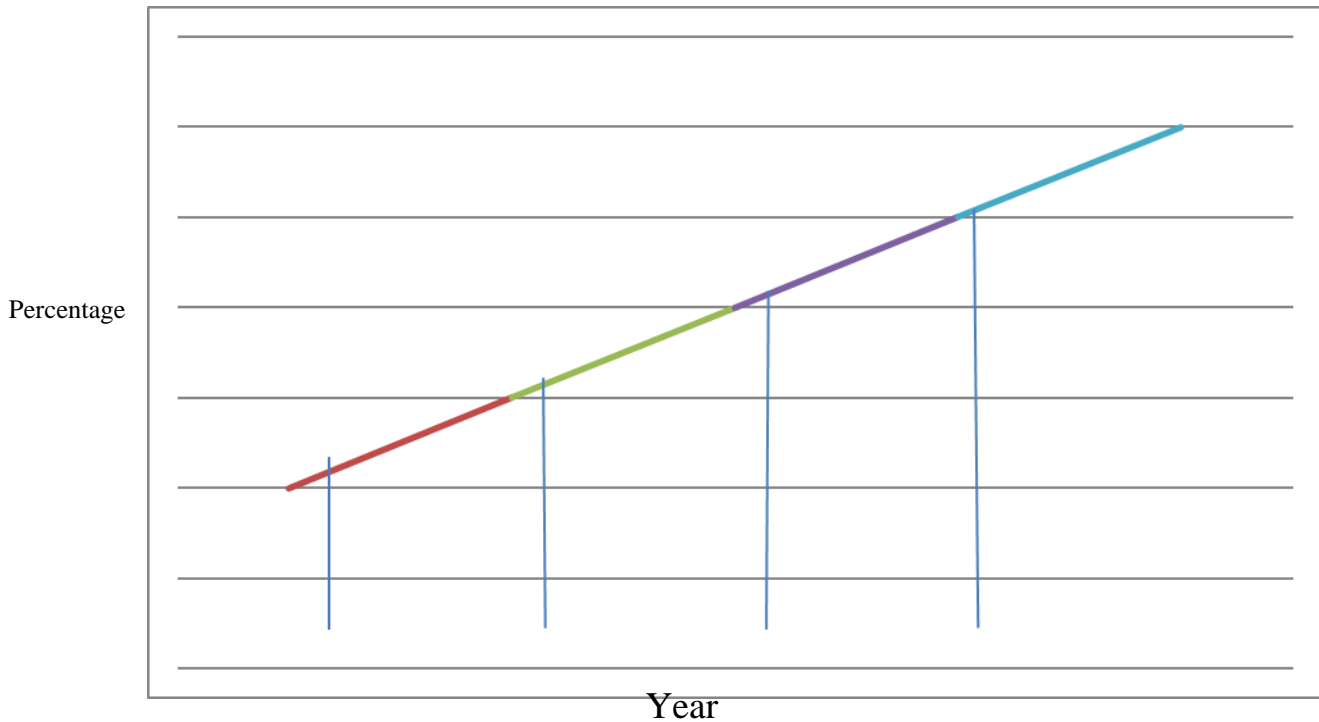
Construction sector is the world's largest industrial employer (Improving Working and Living Conditions in Construction, 2004). In India, it is one of the fastest-growing sectors and the second-largest generator of employment after agriculture. The Indian construction industry employs about 31 million people (India infra guru jobs, 2008) and by 2022 the workforce is expected to increase to 92 million (Government of India, 2011). More than half of the 31 million construction workers in India are women, but their potential is not utilized to the maximum (Government of India, 2008). The status of women is one of the determinants in overall development of any country. This issue is comparatively more serious in developing countries and specifically in construction industry. The construction industry has distinctive characteristics that separate it from other industries. It is project oriented and therefore an organization is disbanded upon the completion of the task (Giritli & Oraz, 2004). The construction industry is not a single body, but a collaboration of many stakeholders from various disciplines so that it gives employment to various professionals and workers at different levels. Thus, it involves multi-tasking activities and multi-disciplinary personnel. Construction is relatively labour intensive; it uses a higher number of workers per unit of output than most other industries. The industry makes use of a wide range of components, such as bricks, tiles, steel sections, and joinery fittings, with each manufacturing industry employing a large workforce. While being a market for other industries, construction also assists the development of other industries. As a result of these backward and forward linkages, it is difficult to define a clear boundary to the construction sector.

Globally, women participation in community development has been generally less than encouraging despite their numerical strength (Eagly & Carli, 2017). The UK construction industry has a particularly low participation rate for women. Currently there are over 11 million

women employed in the UK, accounting for almost 50% of the work force. However, despite increases in the number of women employed in the construction over the past decade, they still constitute only 9% of the work force. This means that the construction industry will continue to be male dominated. It is found that women are confronted by a significant number of barriers, beginning with difficulties in joining the field of construction through to capturing the most senior position in the organization's hierarchy. In this context, this paper presents a review of the literature on the current status of women in the construction; in particular, it discusses the barriers which prevent women's entry and retention in the construction industry.

Figure 1.

Proportion of female employees entering the construction and building industry in U. K.



There is also discrimination and male bias in the provision of services including credit and technology (Doss, 2001). They are also excluded at decision making at household, community and the national levels (Dasgupta & Sudarshan, 2011). They severely bear the cost of trees and forest management and realize only a portion of benefits. They are enlisted to decision making when forest and tree resources are degraded or after conflict. In some parts of Asia, only one

household member can be represented in the forest groups and most of these have been male heads or in some cases women are members by the virtue of their husband's membership (Dasgupta & Sudarshan, 2011). According to (Dahal, 2012), in North East Cambodia, there have been achievements in the implementation of Gender Action Plan of Prakas II Project. Sixteen field training courses on gender and natural resources were conducted in four target provinces. 167 out of 393 participants were women (Dahal, 2012). In Sweden, women perceive building and construction industry differently than men while women employed in the USDA Forest Service are more likely than men to hold positive expectations and higher levels of trustworthiness regarding environmentalists, range users, citizen activists, and tribal representatives.

On the issue of the African cultures, Kasomo (2012) notes that leadership was seen as a man's role and viewed as inconsistent with the values of a good woman. Spouses were generally unsupportive and even sabotaged their wife's leadership pursuits. Obligations to children and family roles swayed women from participating in provincial administration thereby limiting their opportunities of participating in salaried jobs. Men tended to control more of the family financial resources and received more financial support from the community. There was also a distinctly masculine model of leadership in which women had to work extra hard to gain respect or recognition given that feminine traits were associated with weaknesses (Khanal, 2015).

In Nigeria, various interventions and conferences such as the one held in 1989 was embarked upon to improve the status of women in the society. Nigeria is a signatory to many international instruments such as convention on the elimination of all forms of discrimination against women (CEDAW) signed on 13th June 1985. All these efforts made by both Nigerian government and international communities point to the fact that women participation in development has remained abysmally poor both in the developed and developing countries alike but the situation is worst in developing countries like Nigeria where women are regarded as inferior and second class citizen (Khanal, 2015). In Tanzania, Meena (2010) reveals that while women strive to participate in politics through the quota system, many of them end up campaigning for male candidates while others lack support to compete against their male counterparts. Another research conducted in Somalia reveals some of the reasons for low women's participation in politics as lack relevant experience in public decision-making, negative attitudes regarding women's ability to lead and govern, lack of role models of women leaders for young women and

girls, important decisions reached without women's view-point and lack of interest by most women as political positions have been stereotyped into male roles (Froelich, et al, 2012).

Equally, in Uganda by Kasya (2008) women party chairpersons represent only 1.3% of political leaders while Deputy political party Chairpersons 6 represent 71% of political leadership at county level. African, women often take the lead and initiate change in their own local communities yet they remain under-represented in most areas of decision-making (Wollack, 2009). Other hindrances to women's participation include low levels of education, (Woyingi, 2011) and perennial conflicts where women and youth have suffered violence and abuse during civil wars in Congo, Ruanda, Burundi, Sierra Leone, Uganda, and within Kenya during post-election civil conflicts in 1992, 1997 and more recently, 2008 (Brody, 2009).

In Kenya, as Kariuki (2010) posits, some gains can be said to have been gained through establishment of constitutional bodies. The National Gender and Equality Commission for instance, is a constitutional commission established by an Act of Parliament on the 30th of August 2011 to promote the integration of the principles of equality and freedom from discrimination in national and county policies, laws and administrative regulations. Further, the National Gender and Equality Commission (NGEC) established following the promulgation of Kenya's new Constitution in 2010 is mandated to promote gender equality and freedom from discrimination. As part of this broad mandate the NGEC is supposed to work with other relevant institutions in the implementation of policies for the progressive realization of the economic and social rights specified in Article 43 of the Constitution and other written laws. Beyond developing standards for the implementation of these policies the NGEC is also supposed to make efforts to ensure that budgetary provisions are made to support the realization of these rights. One of the key issues to be address is that of sexual and gender-based violence as per Maria and Helisse, (2010). It is against this background that this study will investigate the factors influencing women participation in decision making process in community projects in Marsabit County.

In Kenya the 2030 vision for gender, youth and vulnerable groups is gender equity in power and resource distribution, improved livelihoods for all vulnerable groups, and responsible, globally competitive and prosperous youth. In addition, Kenya aims to increase the participation of women in all economic, social and political decision-making processes though higher

representation in Parliament; improve access of all disadvantaged groups to business opportunities, health and education services, housing and justice; and minimize vulnerabilities through prohibition of retrogressive practices such as female genital mutilation and child labor. According to Bett (2014), stated that women participation in building and construction industry is influenced by cultural values, level of education, resources and family responsibilities are the factors to be investigated in regard to women participation in development projects. Most of the rural people still keep some cultural values that hinder women from participating in community development. Most of these cultural values upheld male chauvinism thus making women to feel that they are unable to participate. Education is the key to any economic improvement of any society; therefore education level for rural women has a direct relationship on their participation in community based development projects. Another factor is resources. This is a factor that incapacitates women from active participation in community based development projects.

Family responsibilities also had a direct bearing on their participation in community projects. Having in mind that we live in patriarchal society, most married women may not be able to make decisions in regard to participation in projects without seek for an idea from the husband. This leads to lack of power to make decisions and may result in a negative effect on women participation in projects. Most women in rural areas have the responsibilities of giving birth, taking care of the children and more so the sick and old people that lead them to lack enough time to participate in community projects. The Kenya constitution (2010) have the issue of gender mainstreaming but still rural women lacks the capacity and information hence still isolated and marginalized (Bett, 2014). Mbogori (2014) states that women are generally not able to participate fully in the building and construction industry because they are more women are poor, illiterate, do not enjoy proper healthcare, victims of violence such as rape, abuse as well as neglected, denied basic rights, discriminated against and suffer other forms of inequality as though their status is below that of men and their situation is far worse than the men's. The development of the pastoral regions is faced with a number of challenges that are being addressed by Northern Rangelands Trust.

In Central Division Isiolo County, the level of women participation manifests itself in all organizations as opinions and attitudes of the different stakeholders in these organizations. In addition, the stakeholders relied upon by the project may also have their own agenda and preferences for participating in the building and construction industry. The relationships to the

project by these stakeholders can vary from very supportive to antagonistic, but depending on their field of influence, must be considered and managed. However, neither the sponsor nor the project manager has control over external politics such as political turmoil which may disrupt the project (Karanja & Kirimi, 2015)

1.2 Statement of the Problem

Participation of women in building and construction can promote women's ability to negotiate and influence policy in favour of women's and possibly children's needs thus reducing poverty (Mbogori, 2014). Without civic education, citizens will not know how they can influence the direction of the changes they would like to see in their localities. Without engagement of women in civic education it is difficult for women to influence other women to participate in building and construction (Kariuki, 2010).

Women in Kenya form 50% of the population. However, in Central Division Isiolo County, women form the largest population of citizens with low literacy levels, low income levels, and least participants in political decision making (Kariuki, 2010). These questions the decisions made at these levels and proposed interventions, leading to poor service delivery. In Kenya women constitute slightly over half of the total population and form a critical portion of the human resource base. However, available data indicates that they inadequately participate in building and construction industry mainly because they not well represented in senior management positions in public institutions a (Kariuki, 2010).

Various studies have been done on women participation socio- political factors on participation of women in development projects. They include a study by Mbogori (2014) focused on the factors influencing the level of women participation in community development projects in the south district of Narok. Another study by Mamah (2015) looked into the level of participation of women in community development in Nigeria. Another one by Korir (2013) showed the influence of women participation in groups on socio-economic development of rural communities in Kenya. These studies presented a literature gap to be filled by this study by answering the question what are the determinants of women participation in the construction industry with special reference to Central Division Isiolo County?

1.3 Purpose of the Study

The main purpose of this study is to establish the determinants of women participation in the construction industry with special reference to Central Division Isiolo County.

1.4 Objectives of the Study

The study was guided by the following objectives:

- i. To establish economic factors that affect participation of women in building and construction industry in Central Division Isiolo County.
- ii. To determine social cultural factors contributing to participation of women in building and construction industry in Central Division Isiolo County.
- iii. To assess the influence of societal factors and participation of women in the building and construction industry in Central Division Isiolo County.
- iv. To establish the influence of attitude on the participation of women in the building and construction industry in Central Division Isiolo County.
- v. To examine the influence of demographic factors on the participation of women in the building and construction industry in Central Division Isiolo County.

1.5 Research Questions

The study sought answers to the following research questions:

- i. What is the effect of economic factors on participation of women in the building and construction industry in Central Division Isiolo County?
- ii. To what extent do social cultural factors affect the participation of women in the building and construction industry in Central Division Isiolo County?
- iii. How does government policy in gender parity affect the participation of women in the building and construction industry in Central Division Isiolo County?
- iv. What is the effect of attitude on the participation of women in the building and construction industry in Central Division Isiolo County?
- v. What is the effect of demographic factors on the participation of women in the building and construction industry in Central Division Isiolo County?

1.6 Significance of the Study

The participation of women in development activities is evident through initiatives such as Village savings and loans associations, civic education activities, resource mobilization and collaboration with entities such as Civil Society Organizations (CSOs), private companies, citizens and other government agencies. Despite these efforts, low participation of women in politics has made it difficult for them to adequately influence policy in favor of effective and efficient service delivery. It is hoped that this study is going to facilitate governments' and CSOs understanding of the benefits of facilitating participation of women in politics in order to promote effective governance as a means to poverty reduction in line with the millennium development Goal No. 1, 3 and 8; Kenyan Constitution (2010) and Kenya's Vision 2030. It is hoped that this study is going to facilitate identification of better strategies for inclusion of women in politics and governance at constituency level order to achieve the 33% critical mass as demonstrated by other developing countries in Africa.

The information and data that would be generated could, therefore, prove worthwhile for future researchers. The study would also be of great importance to the women in a manner that would sensitize them on the relevance of participation on development projects. The study hopes that its findings would be of assistance to gender and devolution planners in formulating policies that would get more women participating in projects. It is hoped that the findings of the study would offer valuable contributions from both a theoretical and practical standpoint. From a theoretical standpoint, it is hoped that the findings generated from this study would make several contributions to both knowledge and understanding of the factors socio- political factors influencing participation of women in development projects under the devolved system of governance in Kenya.. It is expected that the qualitative and quantitative data collected in this study would be made available to planners within the Ministry of Public Service, Youth and Gender Affairs and government agencies such as the Federation of Women Lawyers and Kenya Women Finance Trust. It is hoped that this would lead to better designed, better directed and more specific policy formulation in enhancing women participation.

1.7 Delimitation of the Study

This study is on the women participation in the construction industry with special reference to Central Division Isiolo County. Central Division Isiolo County has been chosen as the study area

since it is one of the areas where most government projects are not successfully implemented. Community leaders, project managers, religious leaders and project committee leaders within community-based development projects formed the population for the study.

1.8 Limitations of the Study

The study anticipated encountering some limitations that might hinder access to information that the study sought. The respondents targeted in this study might be reluctant in giving information fearing that the information being sought might be used to intimidate them or print a negative image about them. The researcher hoped to handle this by carrying an introduction letter from the University to assure them that the information they gave was treated with confidentiality and was used purely for academic purposes.

In addition, the findings of this study were limited to the extent to which the respondents were willing to provide accurate, objective and reliable information. The researcher checked for consistency and test the reliability of the data collected.

1.9 Basic Assumptions of the Study

The study assumes that there were no serious changes in the composition of the target population that might affect the effectiveness of the study sample. This study also assumed that the respondents were honest, cooperative and objective in the response to the research instruments and was available to respond to the research instruments in time. Finally, the study assumed that the authorities in the firms granted the required permission to collect data from employees.

1.10 Definition of Significant Terms Used in the Study

The following are the definitions of terms that was used throughout this study:

Socio-cultural factors – they are strong forces that are linked to culture and society that affects ones' behavior and way of thinking.

Economic factors - they are fundamental factors that affect livelihood in a society.

Level of education-Formal knowledge and skills to perform civil tasks

Participation - is defined as a process which enables people become masters of their own destiny within the framework of their cultural and socio-economic realities.

Cultural practices- In social settings, it is often used broadly to represent entire ways of life. Included in such ways of life are rules, values, and expected behaviors. At its most basic level, culture can be seen as the shared products of a society.

1.11 Organization of the Study

This study was organized into five chapters. Chapter one contained the introduction to the study. It presented background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the Study, delimitations of the study, limitations of the Study and the definition of significant terms. On the other hand, chapter two reviews the literature based on the objectives of the study. It further looked at the conceptual framework and finally the summary. Chapter three covered the research methodology of the study. The chapter described the research design, target population, sampling procedure, tools and techniques of data collection, pre-testing, data analysis, ethical considerations and finally the operational definition of variables.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides an extensive literature and research related to determine of women participation in the construction industry with special reference to Central Division Isiolo County. This literature review summarizes a diverse spectrum of views about institutional determinants as well as the challenges facing women in the building and construction industry. The chapter was thus structured into theoretical, conceptual and empirical review. The study also presented the knowledge gap the chapter seeks to fulfill.

2.2 Participation of Women in the Building and Construction Industry

Women are seriously underrepresented in the construction sector in the European Union even though their representation in other sectors of the economy has increased (Byrne et al., 2005 cited in Haupt and Fester, 2012). In South Africa, women represent only 20 per cent of architects, 12 per cent of quantity surveyors, 2 per cent of civil engineers, 3 per cent of construction Building and construction managers and 0.6 per cent of construction managers (Worrall et al., 2010). In Cuba, published statistics show women's employment in construction at 20.3 per cent of the workforce (Ramirez, 2004), and it is increasing rapidly (Fortune, 2010). Family-friendly practices were not evident in the Australian construction industry (Haupt & Fester, 2012). In a survey conducted in Thai construction industry, it was studied that women engineers in contractor companies were much more affected by problems such as sexual harassment, work-life conflicts and equal opportunity than women engineers in non-contractor companies (Kaewsri & Tongthong, 2011).

In India, 50% of workforce in construction industry is women (Government of India, 2008), but only about 1.4% are engineers, architects, designers and administrators (Chittibabu, 2007), rest work as construction labour. In a longitudinal study conducted in India, findings were: During last decade of 20th century there was a significant drop in preference for civil engineering and electrical engineering; Women engineers strongly perceive that they do not get what they deserve in terms of jobs, promotions, salaries as well as professional recognition; 'Unsatisfactory work opportunities and environment' is perceived as the most important factor affecting their career (Parikh & Sukhatme, 2004).

The under-representation of women at senior levels is attributed to several structural and attitudinal barriers which may be gender-centred or organization-centred (Fernando et al., 2014) and reflects the phenomenon of glass ceiling (Gurjao, 2006).

Women who choose careers in non-traditional occupations such as the construction industry have to face many challenges in order to enter and retain in the industry. The forgoing section discusses the major barriers faced by construction women in terms of entry, career development and retention. Mainly the male dominated image and culture of the construction industry strongly deter women from entering it. Fielden et al (2000) identified with this, citing the industry's poor image as a reason why so many people, regardless of gender, are uninterested in a career in construction. Research by Turrell et al (2003) found that little had changed in the industry with regards to the perceived image; a third of both female and male college students had a negative view of the industry, considering it to be 'no place for women': "women and girls feel that men in the sector may have hostility towards them and that they would be entering 'a man's world'".

The lack of career knowledge discussed earlier is another major barrier that will prevent women from considering a career in construction. The decision as to whether to select a career in the construction industry must be informed prior to leaving school, particularly by those who intend to be a construction professional in the future. The more that school students know about the construction industry, the more likely they are to consider, and potentially select a career in a related profession. Career opportunities must be communicated to school students. Further, it is important to educate parents, teachers and career advisors with the knowledge on professional roles and careers opportunities for women in construction, as they have a significant influence on career selection.

Women in the construction industry could be categorized in three groups: Women working in professional/technical positions; Women in administrative positions; and Women as construction labour working at sites (Ahuja & Kumari, 2012). It is rare to find women contractors and site engineers in the construction sector in India, though there are women architects and designers. Negligible presence of women in construction industry has attracted both government and industry players' attention with focus on studying the issues leading to less participation of women in the sector and in finding ways to resolve these issues (Ahuja & Kumari, 2013). But, in India studies are primarily conducted pertaining to the women of the third group construction workers or labor which are large in number.

2.2.2 Challenges Facing Women in Building and Construction Industry

One of the challenges is hostile work place. Women in construction are subject to belittling remarks, harassment and physical assaults, working in such a distracting live can cause a worker to overlook proper safety precautions leading to injuries (Soderberg, 2009).

Sexual harassment is another challenge as majority of women in construction reports touching, comments and gestures from both male co-workers and supervisors. In some construction sites there is a lot of Isolation. Many women find themselves to be the evilly woman on a job site, creating additional stress. Since mentoring of new workers often is done by colleagues' women may not receive the same attention and on-size training as their male counterparts.

Reproductive hazards on construction sites such as lead and other chemicals are an issue for all, but especially for pregnant women. Pronged standing during pregnancy is associated with preterm birth; strenuous activity such as climbing can be a hazard during the later stages of pregnancy. In addition, pregnancy, family and medical leave are rarely available in construction. (Olojson, 2004; Osha, 1999).

Women inexplicably run a greater risk than men of leaving work. studies have shown that women are twice as likely as men to leave the ministry because of complaints of pain and injury. This may also be linked with low job – control and high job demand which can lead to musculoskeletal disorder (Wangle, 2009).

Recruitment Process is also a challenge. In a study performed by Hossain and Kusakabe in Thailand and Bangladesh shows recruitment process which favors the male workers. Employers prefer to keep the organization male dominated even for tasks such as cost estimation, mapping and documentation. Women were excluded while hiring due to employer's prejudice that construction is unsuitable for women is manifest in the recruitment process where employment is often informal and thro' personal contacts (Dainty et al 2000).

Countries like Bangladesh traditional religious – cultural assumptions, norms and gender ideologies were hindering women participation. Only recently has participation increased due to economic necessities allowing women to work to support the family (Hossain and Kusakabe, 2005).

In Sweden, the students choose the career at the age 14 – 15 years old. At this tender age girls are more influenced by peer pressure, career advisors, teachers and parents about the career

choice favouring the white color jobs to blue collar or the socially acceptable employment (Wangle, 2009; Olofssen, 2000). Restricted promotional opportunities within the organizations showed promotions ‘within companies’ had tended to occur within divisions preventing lateral staff mobility operating divisions in order to maintain sub – cultural environment, to restrict opportunities for women and maintain existing hierarchy and work practices (Dainty *et al.*, 2000). Women were seen as treats to the limited promotional opportunities available within the organizations. The assumptions that root the frequent argument are that women are physically not strong to endure this strenuous task. When entering the gender segregated occupations these women need to prove their competence despite their qualifications and experiences (Clarke et al 2004).

On top of proving their technical skills, women as workers need to have the ability to fit into the accepted behavior of the workplace which can be even problematic. (Olofsson 2004) stated that women seem to agree that they can cope with the physical part of the job while many claimed that they need to be psychologically prepared to be in the building site.

They also need to fit in the accepted behavior of the work place which can even mean compromising their ‘female’ identity (Clarke *at al.*, 2004). Women were found to have progressed at a lower rate in the industry while confronting many obstacles and barriers. A range of interrelated structural and cultural factors defined in this gender disparity in career constraints and exploiting career opportunities. To encourage women participation in construction and building industry they must be provided with support and encouragement for new traditional choices at an early age. Women must be aggressively recruited into training programs with the aim of configuring the curriculum and skill training to assimilate them into the nontraditional employment (Wangle, 2009).

2.3 Economic Factors and Participation of Women in the Building and Construction Industry

Inadequate access to finance is a factor that influences women participation in building and construction industry. The greatest barrier facing women in Kenya is access to finance because of requirements of collateral. In Kenya only 1% of women own property and that makes it very difficult for women to provide collateral for banks. Most women who venture into building and construction industry in the rural areas and need financing lack the needed collateral to enable

them secure bank loans. Responsibility of entrepreneurs for dependants has limited opportunities to make savings or undertake business expansion and diversification Athanne (2011). The financial aspects of setting up a business are without doubt the biggest obstacles to women (Zororo, 2011). Access to finance is a key issue for women. Accessing credit, particularly for starting an enterprise, is one of the major constraints faced by women. Women often have fewer opportunities than men to gain access to credit for various reasons, including lack of collateral, unwillingness to accept household assets as collateral and negative perceptions of female entrepreneurs by loan officers (Mahbub, 2000).

The ability to tap into new markets requires expertise, knowledge and contacts. Women often lack access to training and experience on how to participate in the market place and are therefore unable to market goods and services strategically. Thus, women-owned SMEs are often unable to take on both the production and marketing of their goods. In addition, they have often not been exposed to the international market, and therefore lack knowledge about what is internationally acceptable in particularly women-owned businesses. Women may also fear or face prejudice or sexual harassment and may be restricted in their ability to travel to make contacts (UNECE, 2004).

Women often lack information about how to get a loan, lack the necessary collateral to obtain one and /or face discriminatory laws or practices related to finance and credit Common wealth secretariat (2002) Finding the finance to get a new business going, or to grow an existing one is a difficult challenge.

Women have fewer business contacts, less knowledge of how to deal with the governmental bureaucracy and less bargaining power, all of which further limit their growth. Since most women entrepreneurs operate on a small scale, and are generally not members of professional organizations or part of other networks, they often find it difficult to access information. Most existing networks are male dominated and sometimes not particularly welcoming to women but prefer to be exclusive. Even when a woman does venture into these networks, her task is often difficult because most network activities take place after regular working hours. There are hardly any women-only or women-majority networks where a woman could enter, gain confidence and move further. Lack of networks also deprives women of awareness and exposure to good role models. Few women are invited to join trade missions or delegations, due to the combined

invisibility of women-dominated sectors or sub sectors and of women as individuals within any given sector (Mahbub, 2000). Most women have little access to policymakers or representation on policymaking bodies. Large companies and men can more easily influence policy and have access to policymakers, who are seen more as their peers. Women tend not to belong to, and even less reach leadership positions in, mainstream business organizations, limiting their input into policymaking through lobbying. Women's lack of access to information also limits their knowledgeable input into policymaking (UNECE, 2004).

ILO (2008) added that the key factors that affect women entrepreneurs' performance especially in developing continents like Africa are: vulnerability of women to adverse effects of trade reform; restraints with regard to assets (land); lack of information to exploit opportunities; and Poor mobilization of women entrepreneurs; lack of management skills; lack of awareness among young women of entrepreneurship as a career option; conflicting gender roles; gender inequality inappropriate technology; and constraints at the legal, institutional and policy levels .

Makokha (2006) adds that women entrepreneurs have financial social demands that compete with business capital, leading to a diversion of capital away from business needs. Kinyanjui (2006) records that some entrepreneurs felt that it was difficult to obtain loans as they had to show credit records and they did not fully understand the requirements getting and paying loans. Loans from Kenyan microfinance institutions tend to be limited in amount, have no grace period, are short term in design and carry very high interest rates. Consequently, most women entrepreneurs are likely to have multiple short-term loans to cater for both businesses and social needs. Studies have shown that loans to MSE entrepreneurs only satisfy a fraction of their financial needs (Women Entrepreneurs in Kenya, 2008). Formal financial support is seen to be too expensive for many women entrepreneurs and hence they treat this as a last resort. (Stevenson & Stonge, 2005). Responsibility of entrepreneurs for dependents has limited opportunities to make savings or undertake business expansion and diversification (Farartri, 2006).

Due to lack of resources, many women aspirations are disadvantaged to run for political office. For women to participate effectively in the political process, substantial amounts of resources are required. These include finances, time, infrastructure and people (Women Direct Service Centre, 2006).Of the resources required, finances are the most difficult to access. In order to understand

how economic factors affect Kenyan women especially in Kimilili constituency in the modern political dispensation, it is necessary to make clear the structure they operated in before the colonial period, during the colonial era and after the colonial period. House- Midamba (1990) argues that the status of Kenyan women deteriorated during colonial rule. According to Midamba this deterioration was particularly noticeable because in the pre – colonial era, although women were to some extent subordinated to men under the African Customary law, in many respects the role of men and women were complementary in nature (House-Midamba 1990).

Even though Kenyan women had certain powers in the pre-colonial times, Kenyan traditional culture was predominantly patrilineal and patriarchal. In this environment, men were the predominant force (Odinga, 1967). When the colonialists took over control of the country, they also emphasized male dominance by transferring men's supervisory rights over land to individual legal ownership (Elkins, 2005). As a result of this individual land ownership, women would be denied access to land, something that was new and foreign (Lovett, 1989). This situation exerted a negative impact on the status of women in property ownership. Besides women losing land ownership and control to men (initially to colonial settlers and later to African men), the status of Kenya women was significantly affected by the coming of colonialists.

According to Onsongo (2005), colonial laws disrupted and displaced women's gender roles. This was done through introduction of cash crops, formal education and the monetary economy. While some men secured employment either in large cash crop farms or as clerks in government offices, many women remained in rural areas producing subsistence food. Formal education was also mostly available to men, which meant that the majority of women remained illiterate and, therefore, could not participate in modern economic transactions (Odinga, 1967).

2.4 Socio-Economic factors and Participation of Women in the Building and Construction Industry

Socio-Economic factors are very strong tools of group control. Culture influence the boundaries in which we operate within but for development to take place there is need to do away with culture, to remove its barriers and limitation. Most African cultures, women are not expected to speak before men, something that has kept many women's potential untapped or even unrealized

at all, women are not allowed to own or even inherit from their parent. Given the stereotypic gender roles, the heroes tend to be men as the organizational culture they have created has been unfriendly and uninviting to women. Therefore women's needs are underrepresented and therefore not pressure for challenging existing gender biased relation and ideologies.

Socio-cultural influence is reckoned with breakthrough in gender mainstreaming. The Maasai are generally known for the strong socio-economic factors and norms that govern all aspects of their community. This culture is so ingrained in the growth and upbringing of individuals that it leaves little room for external influence and make it difficult to introduce and accomplish social change. This socio-cultural dimension has negatively affected Maasai women who have experienced high levels of marginalization for many years. Example of this can be seen in their low levels of education and forced marriages (Mutongu, 2013).

The Maasai community is very patriarchal with minimal opportunities for women is challenge these circumstances, or community decisions, for these reason , Maasai women are among the poorest & most marginalized group in Tanzanian Society and their vulnerability is increasing in this unstable economy (Maanda, 2008). It is very common to see external influence expressed in building and construction industry especially in community leaders such as Chief's, Assistant Chief's or even sometime religion leaders have special interest when powers struggle crops up women tend to withdraw and even weaken their power to influence decision making (Mutongu, 2013).

Religion as an integral part of society refers is the shared beliefs and practices of a society. Although religion legitimizes those norms and values that are consistent with the beliefs of a society, It also condemns this norms and values that are not due to its power and influence in society religion has often been used as a tool for social control. The aspect of using religion for social control and societal manipulation is seen even in the political arena when some politicians use religion to assert themselves and their ideas to the masses. The aspects of religion beliefs here in one way or another acts as barriers to women's participation in building and construction industry. For women to be able to participate fully in building and construction industry, these barriers must be broken especially in our rural areas where illiterate women are easily manipulated through these beliefs.

Culture is related to development and as development increases women's standing in society relative to men becomes more equal. On the other hand, two countries could be quite similar in terms of development, but women may have come substantially further in terms of equality in one country than in the other hand. In many countries, tradition continues to emphasize women's primary roles as mothers and housewives and restrict them to those roles. A traditional strong, patriarchal value system favours sexually segregated roles and traditional cultural values militate against the advancement, progress and participation of women in any political process. Roles societies all over the world are dominated by an ideology of a woman place. According to this ideology women should only play the role of working mother which is generally low-paid, according to article obstacles to women participation in parliament. Individual freedom to choose the kind of work he will pursue to determine by the type of society in which one lives. Cultural pressure on Germany women to stay at home after having children is very strong; the issue of not having time to build a base or professional experience prior is having children may also contribute to Germany Women's low rate of returning to work following child birth.

Across all countries, views of gender and the life roles played by men and women are informed by deep social traditions. In most all societies, women have occupied the primary caretakers/homemakers role while men generally look the role of provider. As women increasingly come to occupy to provide the role too, Society's perception on how the tradeoff between women's caretakers and provides roles should be weighed is changing and many women themselves struggle each day to achieve a satisfying balance. According to Bett (2014), the cultural values, level of education, resources and family responsibilities are the factors to be investigated in regard to women participation in development projects. Most of the rural people still keep some cultural values that hinder women from participating in community development. Most of these cultural values upheld male chauvinism thus making women to feel that they are unable to participate. Family responsibilities have a direct bearing on their participation in community projects. Having in mind that we live in patriarchal society, most married women may not be able to make decisions in regard to participation in projects without seek for an idea from the husband. This leads to lack of power to make decisions and may result in a negative effect on women participation in projects. Most women in rural areas have the responsibilities of giving birth, taking care of the children and more so the sick and old people that lead them to lack enough time to participate in community projects. The Kenya constitution (2010) have the

issue of gender mainstreaming but still rural women lacks the capacity and information hence still isolated and marginalized.

2.5 Societal Factors and Participation of Women in the Building and Construction Industry

Women's efforts are often invisible, remaining hidden due to cultural constraints, yet some, especially in the north and west, are open and confident. Some efforts are composed solely of women who deliberately distance themselves from men and the social systems they represent. In Colombia, despite the fact that as many as 30 per cent of the fighters of the Revolutionary Armed Forces of Colombia (FARC) are women, only one woman, Marian Paez, was included among its representatives of official negotiations with the government (McDermott, 2002).

Societal factors are the essential lubricant of development more important even than finance. One weakness of capacity within a multi-stakeholders' project will often condemn the whole project to failure. The term capacity building describes the task of developing levels of human and institutional capacity. Capacity building remains one of the most challenging functions of development (One World Capacity Building Guide 2003). Capacity building is relevant to the highest level of government as well as to the humblest village. The tools of its trade range from women's leadership courses to diagrams explaining water pump maintenance. Individual organizations such as local community groups are crucial providers of capacity building programs whilst themselves often lacking capacity to sustain their mission. However, the pastoralist women have been left out during these sessions.

A recurrent frustration for international donors in their pursuit of effective aid spending has been lacking in capacity of the government to deliver the intended programs. For instance, ending user fees for health and education is an attractive policy option for African governments stimulated by aid and debt relief. In practice, waving fees for primary education has been problematic as neither teacher numbers nor classroom facilities have been able to cope up with the influx of new pupils. Political pressure to allocate generous aid budgets to post-conflict environment invariably hits the buffers of capacity as illustrated by the disappointing development returns achieved for donors in Afghanistan Aid, can be the antithesis capacity the drift into and dependency snuffing out the growth of government institutions (One World Capacity and Building Guide 2008).

Similar capacity needs to apply even more at local government levels, which are notoriously bureaucratic and ineffective in developing countries. As decentralization has entered the

mainstream of development models over recent years, there is constant search for successful capacity building templates, which can be replicated over multiple locations. Limitations of local government units create the space frequently occupied by community-based organizations (CBOS) which may be supported by regional or national or international (NGOS). The CBOS typically possess expert understanding of the needs of local people and are best placed to create the sense of community ownership and a feedback mechanism so important to development projects.

Unfortunately, no amount of this valuable expertise can protect these grassroots CBOS and NGOS from their own Achilles heel of incapacity to sustain them. Invariably they are dependent on donor project finance, which by definition has a beginning and an end the fickle availability, and timing of such funds leaves small organizations highly vulnerable. In their strategies for internal capacity NGO managers often find themselves torn between their non-financial mission and generating earned income. The challenge of diversified financial models is particularly acute for southern based civil society, poorly equipped with relevant fundraising knowledge and cut off from an affluent corporate sector.

Capacity building programs for civil society therefore focus on sustainability as their outcome. Tools will include strategic engagement of volunteers, training in organizations management, use of online peer groups networking and building alliances and improvement of fundraising and donor relationship skills. Relationships can also break down over strategic disagreements and cross-cultural misunderstanding. New theories for effective community development and its evaluation hatched in western conference centers do not chime in with equally innovative ideas generated at village level.

This faultiness in the current mainstream structure for development projects may create openings for the new breed of social entrepreneurs whose ideas of capacity building are likely to be more tuned to success of an organization rather than success of an individual project. Unfortunately, top-down perception of what constitute "better lives" does not always coincide with real needs. Benefits given, rather than asked for, to the wrong people on the wrong skills etc will prolong rather than alleviate poverty environment. A key dimension of capacity building for communities is therefore the "needs assessment" involving techniques such as "participatory rural appraisal" to understand what inventions will trigger the most positive response and impact (Swanepoel, 2006).

2.6 Attitude and Participation of Women in the Building and Construction Industry

Women being the backbone of rural economies in developing countries and specifically in Africa, play a significant role to ensure their families' well-being. This is seen in terms of providing food, shelter, health and education for the children. Being the majority (about 55%) of the rural population, their role is crucial in bringing about change in their communities. Most of the rural women provide for their families through subsistence farming and other agricultural activities supplemented by petty trade or micro enterprises. Agriculture, which is practiced mainly for home use, takes various forms such as, keeping chicken, growing vegetables, tending the family garden and small-scale horticulture for the market place, among others (Antal & Israeli, 2003).

The experts' analyses revealed that both the experience and the critical mass arguments were problematic. Quality leadership presented by women is high since they understand society social issues, since women bear the heavy burden of managing family problems. The experience argument tends to treat women as a homogenous group without acknowledging the economic, social and cultural diversity among them. The critical mass argument often views the 30 percent representation of women as a panacea and denies the evidence of contexts where women do achieve effective representation in smaller numbers transparency, continuing commitment to women's interests especially by the government is well demonstrated in Kenya where the new constitution introduce women legislator's representatives will connection with constituents their counties directly (Kenya New Constistution, 2010).

Women's testimonies are very powerful and varied, and that women's experiences are not uniform, hence the need to bring out more visible individual settings. She observed that while women play a key role woman. Effectiveness: skills and knowledge, capacity to deal with power, strategic positioning in political position, women are sent back to the kitchen after peace has been achieved because peace is believed to be for leaders. She stated that the UN Resolution 1325 (2000) holds out a promise to women across the globe that their rights will be protected and that barriers to their equal participation and full involvement in the maintenance and promotion of sustainable peace will be removed. She urged the women to uphold the promise their Effective skills and knowledge in handling and understanding society social issues women, skills and knowledge of campaigning in a male dominated society, the women capacity to deal with power strategic positioning in political parties is a big challenge that is facing women in the political career, capacity to deal with power, strategic positioning in political position. There is greater participation of women although they are

still struggling for positions of high responsibility. It has proved difficult for women to achieve these positions without compromising their solidarity for women's issues and concerns. Participants highlighted the need for capacity-building of women politicians to increase their empowerment. The issue of the number of women in political institutions was raised and linked to the issue of solidarity between women (Hein and Cassirer, 2009).

Several factors may influence the decision for or against women entrepreneurship. Literature cites amongst others, personal characteristics, finance, and business characteristics as the most important ones (Naser et al., 2009). These factors are reviewed in the following sections. One of the main factors affecting women entrepreneurship and that is widely documented in the literature concerns their personal characteristics. In general, women embrace entrepreneurship between the age range of 31- 44 (Nearchou-Ellinas & Kountouris, 2004) indicating that women start running their businesses at an older age. This late entry may be explained by several factors including, family obligations and glass ceiling factors (Kephart & Schumacher 2005). However, other studies indicate that more women are now starting business at a much earlier age. In a recent study on Nigerian women entrepreneurs, the authors found that nearly half of their sample of women entrepreneurs started their business between 19-24 years old (Mordi et al., 2010).

Pressure to run a home, look after children and care for the husband and family limit women. Negative economic development impacts negatively on women as they have to cope with taking care of children, often as single parents (Morris & Brenan, 2003). One other challenge is the responsibility of providing for the extended family and relatives. Most micro-enterprise financial resources are not usually isolated from personal finances and hence these family obligations are met from resources earned in the business. Their demands tend to drain the savings and income made by the business, since such finances would otherwise have been used in the enterprise for expansion and growth. Though some of them do assist in providing services in the enterprise (or in the family), the financial obligations in supporting them usually exceeds the services they provide (Powell & Graves, 2003).

Motivation refers to those forces operating within an individual which compel him to act in a certain manner (Monnappa, 2008). Work has different connotations to different people. Some people will consider some types of work as hobbies or play while others will not participate in a play unless for pay. Mostly, the motives that drive people to work are intrinsic. They have a need for achievement which is the desire to accomplish a task or goal which then gives them

satisfaction. Among the early proponents of motivations, Maslow's Hierarchy of needs is of special significance in work related issues. It has five progressive needs structure that explains individuals drive, that is physiological, social, ego, and self-actualization (Monnappa, 2008).

2.7 Demographic Factors and Participation of Women in the Building and Construction Industry

Demographic factors influence individuals in their functional members of their society (Ocho, 2005). In every society education connotes acquisition of something good, something worthwhile (Ministry of Education Report, 2010). According to American sociologists Burns, Schlozman and Verba (2001) assert, that education is an 'especially powerful predictor of political participation.' Education instills interest in political matters and educated women would be more adept to seek elective office (Yoon, 2004).

Education therefore plays an important part in shaping one's life. In the colonial time only those parents converted to Christianity tended to appreciate the importance of formal education were usually taught welfare and domestic subjects such as cookery, tailoring, home science, and such like subjects, meant to prepare them to be house wives and mothers. The education system failed to empower women as equal to men in public and development arena (Synder and Tadesse 1995). There is considerable evidence for the claim that access to education can bring about changes in cognitive ability, which is important in a woman's capacity to question, to reflect on and act on the conditions of their and gain access to knowledge, information and new ideas that will help them to do so (Jejeebhoy, 1995).

Education increases the likelihood that women will look after their own wellbeing including that of their family. There are also other effects associated with education that suggests a change in power relations within and outside the household, educated women participate more in decision making issues than those who are not, education increases the capacity of women to be able to deal with outside world including government officials and service providers of all kinds (Kabeer, 2005). Since women are excluded from leadership roles, they are deprived of opportunities for leadership skills training. Girls have less chance for schooling and opportunities are drastically limited for them to develop skills and talents in the public sphere. They are praised for obedience and subservience, implicitly dissuading them from aspirations to leadership. Higher education is a privilege many women do not enjoy. They are passed up for

training opportunities at work because it is not cost efficient to invest in women who may give up work anytime for the sake of family.

Construction is a labour intensive as well as craft-based activity and the behaviour of people has an enormous influence upon the organization and performance of construction firms. Sustainable development of construction industry has to concentrate not only on sustainable building technologies and construction materials but also on respectful and considerate labour management strategies. Workforce has to be treated as the most valuable un-reproducible resource with vulnerable and hardly predictable behaviour.

The education system in Kenya has not favoured women, and this brings a lot about the current discrimination practices in the system. At first women or girls were educated on how to take care of their families as for example in home science covers and socialized on secondary importance of men. But boys and men were educated for jobs away from home and they are bread winners of their families. This system played key role in eliminating women in key economic activities though they played a key role in subsistence economies and create structure where women are solely responsible for reproductive roles. This makes men to have a better hand in education and dominate most of social institutions and women in more cases become passive recipient of male chauvinism (Mutongu, 2013).

Women are major contributors to national economics through both paid and their unpaid labour. As far as the letter is concerned, rural women's input and their role as a significant electorate should not be underestimated. Although the importance of women's biological and social roles is clear. Their input in all spheres of life often goes unrecognized. Eradicating poverty will have a positive impact on women increased participation in the democratic process. The economic empowerment of women, along with education and access to information will take women from the constraints of the household to full participation in building and construction industry.

Few women can be cited as political leaders including: Queen Elizabeth of the United Kingdom, Margaret Thatcher, former prime minister of England (1979 – 1990) (Spartacus Educational, 2012) Benazir Butto, former prime Minister of Pakistan (1988 – 1996) (Achievements.org, 2012), Graca Mashelle of South Africa who also participated in mediation for formation of Kenya's Government of National Unity after post-election violence in 2008 (SmartCape, 2010), Ellen Johnson Sirleaf, current president of Liberia (Nobelprize.org, 2011), and late Prof.

Wangari Maathai, who influenced the world on the importance of building and construction industry in global governance through the Green Belt Movement. As a result, she received the Nobel Peace Prize of 2004 (Greenbelt.org, 2012), for her contribution to sustainable development, democracy and peace.

According to UNPD (2010), women's large-scale entry in politics will bring about a desirable shift in their participation in local political economy including effective use of human and financial resources. A study by the UN maintains that the feeble presence of women in politics questions the decisions taken in the political arena and the legitimacy of democratic systems. The report argues that women are directly aware of their basic problems and needs but are denied the opportunity to articulate and safeguard their interests due to low representation in politics (Kasya, 2008). While a research conducted by the UN on the state of women's leadership in post war countries indicates a 49% representation of women in parliament; women's representation globally remained low at 17% by 2007 (Eagly & Carli, 2017).

2.8 Theoretical Orientation

There are different theories on participation, each identifying own paradigm and concept on women participation in building and construction industry. Some of these theories include community development theory, role congruity theory, gender and development and agency theory.

2.8.1 Community Development Theory

Community Development Theory was developed by Robert K. Merton in 1960s. The theory focuses on the centrality of oppressed people in the process of overcoming externally imposed socio-cultural problems. Social work, at its foundation, shares much in common with the tenets of community development. Castillejo (2009) offers definitions of both which succinctly point to the similarities as well as the unique distinction. Social work is defined as professional intervention to address situations of personal distress and crisis by shaping and changing the social environment in which people live. Community development is defined as the employment of community structures to address social needs and empower groups of people (Dasgupta & Sudarshan, 2011).

COS focused attention almost exclusively on individuals and sought to provide charity and services to the poor; the COS model viewed the role of the worker as the 'expert' in the process of aid and change (Brady, 2008). By contrast, the settlement house movement focused on the environment and communities in which the poor lived by moving into the immigrant and oppressed areas and developing an understanding of the issues leading to an individual's poverty; settlement house workers then sought to work in collaboration with the poor to achieve community change, viewing the role of the worker as a facilitator in the process of change (Muhammad & Yasin, 2011). This theory is relevant to this study as it addresses centrality of oppressed people in the process of overcoming externally imposed social problems that are to be evaluated in this study on socio-economic factors and their influence on women participation in building and construction industry.

2.8.2 Role Congruity Theory

This theory explains that when women engage in masculine or male-dominated roles of aggressive, ambitious, independent and self-confident in leadership positions, they are evaluated less favorably than men because such management roles are more stereotypically associated with men (Reis & Grady, 2017). Typically, people have congruent beliefs about men and leadership posts, but they have dissimilar beliefs about women in leadership posts. This creates similar male expectations, but not for female leaders.

According to Powell (2012), comprehensive study, on women and men in management, women tended to employ a more democratic, participative style while men tended to take a more autocratic, directive approach. These differences appeared in both laboratory studies and observations of real leaders. Thus it was argued that women's tendency to negotiate, mediate, facilitate, and communicate was more effective leadership style than men's emphasis on power and control; and because this "feminine" style reduced hierarchy, satisfied subordinates, and achieved results, it should be the norm to which men were compared (Mulwa, 2011).

Though females' early socialization and other obstacles impeded them from becoming leaders, those who ascended did not behave significantly different from men in the same kinds of positions (Helgesen, 2011). The differences in leadership style and managerial behaviour were discerned in the past. The examination of male/female differences were studied in three main

types of managerial behaviour (Nelton, 2011). Therefore, differences disappeared where actual leaders were compared mostly it was concluded that women did not behave differently from men in the same or similar kind of leadership positions. Moreover, experienced women managers showed no differences in leadership abilities from experienced male managers. The women, in fact, were likely to more closely resemble their male counterparts in drive, skills, temperament and competitiveness than the average woman in the population. Managers were urged to adopt a caring, collaborative, nurturing and servant leadership styles (Sagan, 2013).

In addition, when engaging in the masculine roles necessary in those leadership positions, women are evaluated less favorably than men, because such behavior is perceived as less desirable in women than men. That is, women who behave in a confident, aggressive, independent manner are seen as behaving incongruous to their societal gender norm. This creates dissonance and less favourable impressions than their male counterparts given that gender norms suggest males should demonstrate aggressive, confident, and independent behavior (Onubogu, 2011).

This theory is relevant in this study because it elaborates on issues addressing competence level of women that is influenced by educational levels, accessibility to information, training in projects, capacity building, knowledge and insight that are key in their participation in building and construction industry.

2.8.3 Gender and Development Theory

Early approaches to women in development recognized that development had ignored the important role played by women in their communities and, as a result, largely excluded them from the design and implementation of development projects. The women in development (WID) approach recognize that more efficient and effective development requires the active participation of women as well as men. Seeking to remedy women's exclusion from the development process, the WID approach focuses mainly upon women (Oshewolo, 2011).

Since mid1980's there has been a growing consensus that sustainable development requires an understanding of women's roles and responsibilities within the community and their relationship to each other. Lindsey, Homes, and McCall (2013) noted that improving the status of women is no longer seen as just a women's issue but as a goal that requires the active participation of men

and women. This has come to be known as the gender and development (GAD) approach. The GAD approach, through gender analysis, seeks to understand the roles, responsibilities, resources and priorities of women and men within a specific context, examining the social, economic and environmental factors which influence their participation in building and construction industry.

Gender and Development is, therefore, an analytical approach which considers both women's and men's roles and responsibilities within the community and their relationship to each other in order to ensure that women's concerns and needs are addressed in design and implementation of activities. Spivak (2014) argued that it is thus an approach that looks at women as an integral part of the family, community and the larger society. Through gender analysis techniques, the roles and rights of both women and men are studied to help planners and Building and construction managers design how development interventions may be made more effectively. Male domineering and gender stereotype factors influence participation of women in development projects, therefore this theory as it addresses on gender and development it's relevant in helping understand how women can efficiently and effectively participate in development. Gender analysis helps in establishing more sustainable and effective development.

2.8.4 The agency theory

Agency theory extends the analysis of the firm to include separation of ownership and control and managerial motivation. In the field of participation in projects, management agency issues have been shown to influence managerial attitudes toward participation (Wollack, 2010). The theory explains how best to organize relationships in which one party determines the work and the other party do the work. It also explains a possible mismatch of interest between shareholders, management and debt holders due to asymmetries in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value projects (Covin & Wales, 2012). Consequently, agency theory implies that defined hedging policies can have important influence on firm value (Wollack, 2010).

It becomes necessary to carefully identify the challenges that may occur over the life of the project, from conception to operation, and allocate those tasks to the participants who are best able to manage them (Zou, Zhang & Wang, 2007). This study examined the support of top management in project success. Therefore this theory is relevant in understanding the influence of management support on women participation in building and construction industry.

2.10 Conceptual Framework

The conceptual framework of the study can be summarized in the figure 1. It shows the relationship between independent variable and dependent variable. Furthermore, it also shows other factors, moderating and intervening variables that can play in and affect both independent and dependent variables in this study.

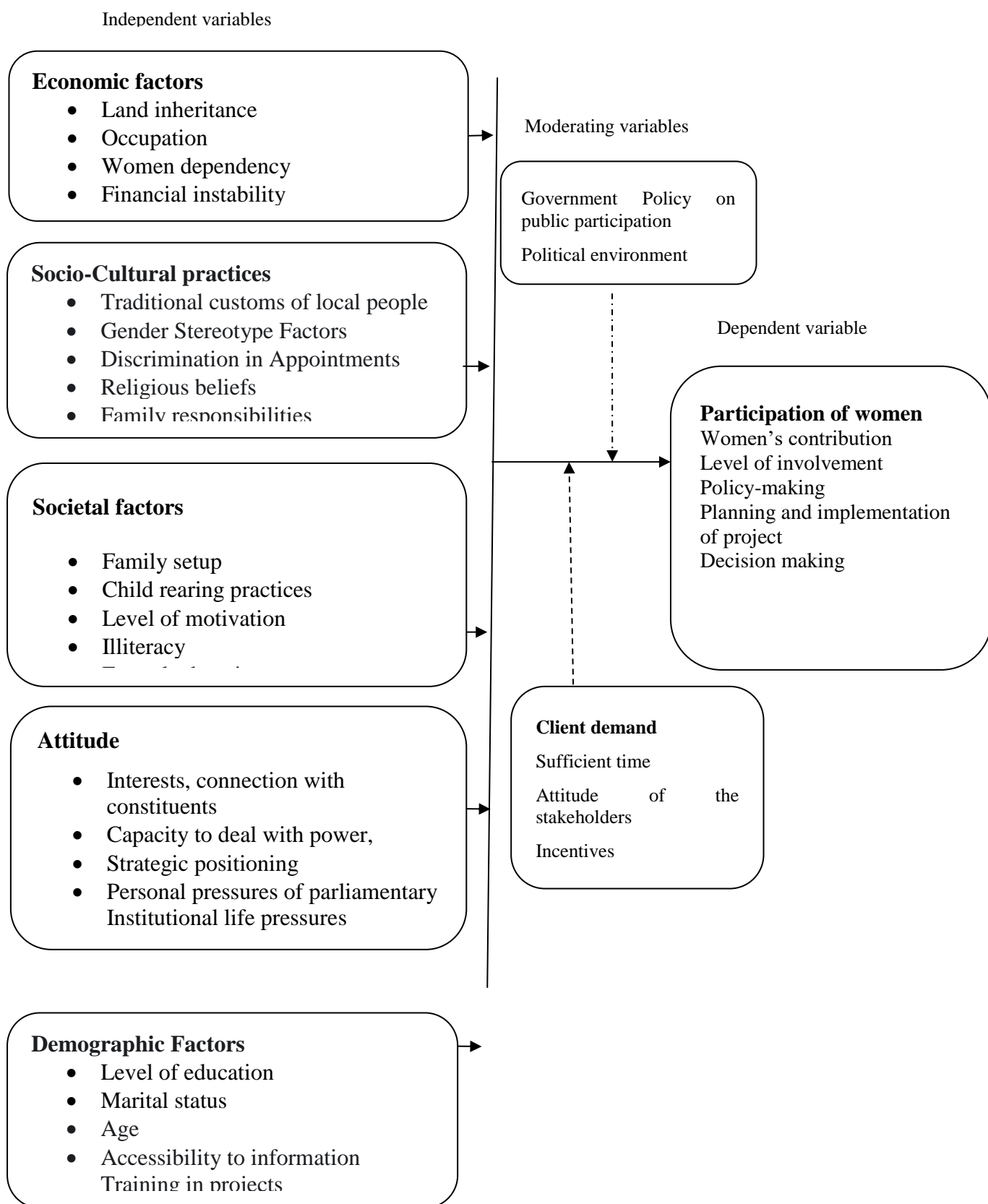


Figure 1: Conceptual framework

2.11 Summary and Research Gaps

Local socio-culture provides a sense of identity for communities and residents. This identity facilitates common understandings, traditions, and values that are all central to identifying plans of action to improve well-being. Culture contributes to building a sense of local identity and solidarity. It influences the confidence that communities have for coming together to address specific needs and problems. In the Kenyan constitution, there are provisions that take care of the women inclusion and fighting women insubordination; the one third rules in all the elective positions where either gender should not be less than a third of the positions. Few women can be cited as political leaders including: Queen Elizabeth of the United Kingdom, Margaret Thatcher, former prime minister of England (Spartacus Educational, 2012) Benazir Butto, former prime Minister of Pakistan (1988 – 1996). Education and training of girls and women is a human right and an essential element for the full enjoyment of all other social, economic, cultural and political rights. Early approaches to women in building and construction industry recognized that development had ignored the important role played by women in their communities and as a result, largely excluded them from the design and participation in management of the projects. The critical factors that influence participation of women in projects fall into four main categories: Socio-cultural practices, level of education, institutional factors and management support.

Various studies have been done on women participation socio- political factors on participation of women in development projects. They include a study by Mbogori (2014) focused on the factors influencing the level of women participation in community development projects in the south district of Narok. Another study by Mamah (2015) looked into the level of participation of women in community development in Nigeria. Another one by Korir (2013) showed the influence of women participation in groups on socio-economic development of rural communities in Kenya. These studies present a literature gap to be filled by this study by answering the question what determines of women participation in the construction industry with special reference to Central Division Isiolo County?

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the procedures and techniques that were used in the collection, processing and analysis of data. Specifically, the following subsections were included; research design, target population and sampling, data collection instruments, data collection procedures and finally data analysis.

3.2 Research Design

The study adopted a descriptive research design. A descriptive design is concerned with determining the frequency with which something occurs or the relationship between variables (Bryman & Bell, 2011). Thus, this approach is suitable for this study, since the study intends to collect comprehensive information through descriptions which was helpful for identifying variables. Bryman and Bell (2011) assert that a descriptive design seeks to get information that describes existing phenomena by asking questions relating to individual perceptions and attitudes.

3.3 Target population

According to Sekaran and Bougie (2010), a population is the total collection of elements about which we wish to make inferences. The target population for this study composed of the community leaders, Building and construction managers, religious leaders and Building and construction committee leaders, Central Division Isiolo County as shown in Table 3.1.

Table 3. 1: Target population

Member Classification	Target Population	Percentage
Community leaders	75	24.1
Building and construction managers	67	21.5
Religious leaders	71	22.8
Building and construction committee leaders	98	31.5
Total	311	100.0

3.4 Sample size and Sampling Procedures

This section presents sample size determination and sampling procedures that was adopted.

3.4.1 Sampling Size

The sample size is a subset of the population that is taken to be representatives of the entire population (Kumar, 2011). The sample size for the proposed study consisted of 172 community leaders, Building and construction managers, religious leaders and Building and construction committee leaders, Central Division, drawn from the target population. According to KIM (2009) for one to get a sample size, three factors have to be considered: the level of precision, confidence level and the level of variability. To achieve a sample size that allowed for generalization of research results, the researcher chose to adopt the following formula for calculation of the sample size for population proportions at $\pm 10\%$ precision level and 95% confidence level. Using Kothari's (2004) formula to determine the sample size, the sample size in the study was 172; as illustrated in the Table 3.2.

$$n = \frac{z^2 \cdot N \cdot \hat{p}^2}{(N - 1)e^2 + z^2 \hat{p}^2}$$

Where; n = Size of the sample,

N = Size of the population and given as 311,

e = Acceptable error and given as 0.05,

\hat{p} = The standard deviation of the population and given as 0.5 where not known,

Z = Standard variate at a confidence level given as 1.96 at 95% confidence level.

The sample size fits within the minimum of 30 proposed by Saunders, Lewis and Thornhill (2012).

Table 3. 2: Sampling Frame

Leaders	Target Population	Ratio	Sample Size
Community leaders	75	0.55	41
Building and construction managers	67	0.55	37
Religious leaders	71	0.55	39
Building and construction committee leaders	98	0.55	54
Total	311		172

3.4.2 Sampling Procedures

The study selected the respondents using stratified proportionate random sampling technique. Stratified random sampling is unbiased sampling method of grouping heterogeneous population

into homogenous subsets then making a selection within the individual subset to ensure representativeness. The goal of stratified random sampling is to achieve the desired representation from various sub-groups in the population. In stratified random sampling subjects are selected in such a way that the existing sub-groups in the population are more or less represented in the sample (Kothari, 2004). The study used simple random sampling to pick the respondents in each stratum.

3.5 Research Instruments

Primary data was obtained using self-administered questionnaires. The questionnaire was made up of both open ended and closed ended questions. The open-ended questions were used so as to encourage the respondent to give an in-depth and felt response without feeling held back in illuminating of any information and the closed ended questions allow respondent to respond from limited options that had been stated. According to Saunders (2011), the open ended or unstructured questions allow profound response from the respondents while the closed or structured questions are generally easier to evaluate. The questionnaires were used in an effort to conserve time and money as well as to facilitate an easier analysis as they were in immediate usable form.

3.6 Pilot Testing

Pilot testing refers to putting of the research questions into test to a different study population but with similar characteristics as the study population to be studied (Kumar, 2005). 17 questionnaires were administered to the pilot survey respondents who were chosen at random. After one day the same participants were requested to respond to the same questionnaires but without prior notification in order to ascertain any variation in responses of the first and the second test. This is very important in the research process because it assists in identification and correction of vague questions and unclear instructions. It is also a great opportunity to capture the important comments and suggestions from the participants. This helped to improve on the efficiency of the instrument. This process was repeated until the researcher is satisfied that the instrument does not have variations or vagueness.

3.7 Validity of Research Instruments

According to Golafshani (2012), validity is the accuracy and meaningfulness of inferences, based on the research results. One of the main reasons for conducting the pilot study is to ascertain the validity of the questionnaire. The study used content validity which draws an inference from test

scores to a large domain of items similar to those on the test. Content validity is concerned with sample-population representativeness. Gillham (2011) stated that the knowledge and skills covered by the test items should be representative to the larger domain of knowledge and skills. Expert opinion was requested to comment on the representativeness and suitability of questions and give suggestions of corrections to be made to the structure of the research tools. This helped to improve the content validity of the data that was collected. Content validity was obtained by asking for the opinion of the supervisor, lecturers and other professionals on whether the questionnaire was adequate.

3.8 Reliability of Research Instruments

Instrument reliability on the other hand is the extent to which a research instrument produces similar results on different occasions under similar conditions. It's the degree of consistency with which it measures whatever it is meant to measure (Bell, 2010). Reliability is concerned with the question of whether the results of a study are repeatable. The questionnaires were administered to a pilot group of 29 randomly selected respondents from the target population and their responses used to check the reliability of the tool. This comprised of 10% of the sample size. A construct composite reliability co-efficient (Cronbach alpha) of 0.7 or above, for all the constructs, is considered to be adequate for this study (Rousson, Gasser and Seifer, 2012). Reliability coefficient of the research instrument was assessed using Cronbach's alpha (α) which is computed as follows:

$$A = \frac{k}{k-1} \times [1 - \frac{\sum (S^2)}{\sum S^2 \text{sum}}]$$

Where:

α = Cronbach's alpha

k = Number of responses

$\sum (S^2)$ = Variance of individual items summed up

$\sum S^2 \text{sum}$ = Variance of summed up scores

3.9 Data Collection Procedures

The researcher obtained an introduction letter from the university which was presented to each stakeholder so as to be allowed to collect the necessary data from the respondents. The drop and pick method was preferred for questionnaire administration so as to give respondents enough

time to give well thought out responses. The researcher booked appointment with respondent organizations at least two days before visiting to administer questionnaires. The researcher personally administered the research instruments to the respondents. This enables the researcher to establish rapport, explain the purpose of the study and the meaning of items that may not be clear as observed by Best and Khan (2003).

3.10 Data Analysis Techniques

Data was analyzed using Statistical Package for Social Sciences (SPSS Version 21.0). All the questionnaires received were referenced and items in the questionnaire were coded to facilitate data entry. After data cleaning which entails checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the quantitative variables and information presented in form of tables. The qualitative data from the open-ended questions were analyzed using conceptual content analysis and presented in prose

Inferential data analysis was done using multiple regression analysis. Multiple regression analysis was used to establish the relations between the independent and dependent variables. Multiple regressions were used because it is the procedure that uses two or more independent variables to predict a dependent variable. The study the multiple regression models generally assumed the following equation;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where: -

Y= Participation of women in building and construction industry

β_0 =constant

$\beta_1, \beta_2, \beta_3$ and β_4 = regression coefficients

X_1 = Economic factors

X_2 = Social cultural factors

X_3 = Government policy in gender parity

X_4 = Attitude

X_5 = Demographic factors

ε =Error Term

3.12 Ethical Considerations

The researcher observed the following standards of behaviour in relation to the rights of those who become subject of the study or are affected by it: First, in dealing with the participants, they were informed of the objective of the study and the confidentiality of obtained information, through a letter to enable them give informed consent. Once consent is granted, the participants maintained their right, which entails but is not limited to withdraw or decline to take part in some aspect of the research including rights not to answer any question or set of questions and/or not to provide any data requested; and possibly to withdraw data they have provided. Caution was observed to ensure that no participant is coerced into taking part in the study and, the researcher seeks to use minimum time and resources in acquiring the information required. Secondly, the study adopted quantitative research methods for reliability, objectivity and independence of the researcher. While conducting the study, the researcher ensured that research ethics are observed. Participation in the study was voluntary. Privacy and confidentiality was also observed. The objectives of the study were explained to the respondents with an assurance that the data provided was used for academic purpose only.

3.13 Operationalization of Variables

The operationalization of variables is shown in Table 3.3.

Table 3.3: Operationalization of variables

Objectives	Type of Variable	Indicator	Measuring of Indicators	Tools of analysis	Type of analysis
To establish economic factors that affect participation of women in building and construction industry in Central Division Isiolo County.	Independent	Economic factors	Land inheritance Occupation Women dependency Financial instability	Percentages Mean score	Descriptive statistics Regression analysis
To determine social cultural factors contributing to participation of women in building and construction industry in Central Division Isiolo County.	Independent	Socio-Cultural practices	Traditional customs of local people Gender Stereotype Factors Discrimination in Appointments Religious beliefs Family responsibilities	Percentages Mean score	Descriptive statistics Regression analysis
To assess the influence of societal factors and participation of women in the building and construction industry in Central Division Isiolo County.	Independent	societal factors	Family setup Child rearing practices Level of motivation Illiteracy Formal education	Percentages Mean score	Descriptive statistics Regression analysis

To establish the influence of attitude on the participation of women in the building and construction industry in Central Division Isiolo County.	Independent	Attitude	Interests, connection with constituents Capacity to deal with power, Strategic positioning Personal pressures of parliamentary Institutional life pressures	Percentages Mean score	Descriptive statistics Regression analysis
To examine the influence of demographic factors on the participation of women in the building and construction industry in Central Division Isiolo County	Independent	Demographic Factors	Level of education Marital status Age Accessibility to information Training in projects	Percentages Mean score	Descriptive statistics Regression analysis
	Dependent	Participation of women	Women's contribution Level of involvement Policy-making Planning and implementation of project Decision making	Mean score	Descriptive statistics Regression analysis

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter discusses the findings obtained from the primary instrument used in the study. It discusses the characteristics of the respondents, their opinions on the determinants of women participation in the construction industry with special reference to Central Division Isiolo County. In order to simplify the discussions, the researcher provided tables that summarized the collective reactions of the respondents.

4.2 Response Rate

In this study, the researcher administered 172 copies of questionnaires to the respondents upon which 122 were completed and received back. This gave a 70.93% response rate which is within what Kumar (2011) prescribed as a significant response rate for statistical analysis and established it at a minimal value of 50%.

4.3 Reliability Analysis

A pilot study was carried out to determine reliability of the questionnaires. A total of 17 questionnaires were administered to the pilot survey respondents who was chosen at random. Reliability analysis was subsequently done using Cronbach's Alpha which measures the internal consistency by establishing if certain items within a scale measure the same construct were set at 0.7, thus forming the study's benchmark.

Table 4. 1: Reliability Analysis

	Cronbach's Alpha	Decision
Economic factors	.821	Reliable
Social cultural factors	.833	Reliable
Societal factors	.741	Reliable
Attitude	.708	Reliable
Demographic Factors	.867	Reliable

From the findings, economic factors had a Cronbach's Alpha of 0.821, social cultural factors had a Cronbach's Alpha of 0.833, societal factors had a Cronbach's Alpha of 0.741, attitude had a Cronbach's Alpha of 0.708 and Demographic Factors had a Cronbach's Alpha of 0.867. Since all variables coefficients were above 0.7 it implied that all of them were reliable and accepted.

4.4 Background Information

The researcher was interested in the respondents' general information including their gender, how long they have been working in building and construction industry, highest level of educational and age bracket. Their responses were as presented in subsequent subsections.

4.4.1 Gender of the Respondents

The researcher was interested in establishing gender distributions of the respondents. The findings were indicated in Table 4.2.

Table 4. 2: Gender of the Respondents

	Frequency	Percent
Male	22	18
Female	100	82
Total	122	100

From the results, majority of the respondents were female as shown by 82% while the rest were male as illustrated by 18%. From the findings, more were women since the researcher was interested in obtaining women views on their participation in building and construction industry however reliable information was obtained from all the respondents regardless of the gender although more information was obtained from female who were the majority respondents.

4.4.2 Period Working in Building and Construction Industry

The respondents were requested to indicate how long they have been working in building and construction industry. Their responses were as shown in table 4.3.

Table 4. 3: Period Working in Building and Construction Industry

	Frequency	Percent
Less than 3 years	1	0.5
3 to 9 years	38	31.1
9 to 12 years	61	50
Above 12 years	22	18.4
Total	122	100

The findings show that, majority of respondents indicated that they have been working in building and construction industry for 9 to 12 years as shown by 50%. Further the respondents indicated that they have been working in building and construction industry for 3 to 9 years as shown by 31.1%, for a period of above 12 years as shown by 18.4% and for a

period of less than 3 years as shown by 0.5%. The more an individual participates in something the more information is possessed by the individual. Therefore since the respondents had participated in the building and construction industry for long enough, they provided reliable information being sought by the researcher.

4.4.3 Highest Level of Education

The respondents also were asked to indicate their highest level of education. Their responses were as shown in table 4.4.

Table 4. 4: Highest Level of Education

	Frequency	Percent
Certificate/Diploma	17	14.2
Degree	75	61.3
Masters	14	12.7
PhD	15	11.8
Total	122	100

From the findings, 61.3 % of the respondents indicated that their highest level of education was degree, 14.2% of the respondents indicated that their highest level of education was diploma, 12.7% of the respondents indicated that their highest level of education was masters and 11.8% indicated that their highest level of education as PhD. This shows that majority of the respondents were learnt enough and could comprehend the subject under study and hence they gave correct and reliable information.

4.4.4 Age Bracket

The researcher also asked the respondents to indicate their age bracket. Their responses were as shown in table 4.5.

Table 4. 5: Age Bracket

	Frequency	Percent
20-30 years	30	24.5
31-40 years	17	13.7
41-50 years	50	40.6
51 – 60 years	26	21.2
Total	122	100

The results shows that, 40.6% of the respondents were aged between 41 and 50 years, 24.5% of the respondents were aged between 20 and 30 years, 21.2% of the respondents were aged between 51 and 60 years with only 13.7% of the respondents aged 31 to 40 years. Therefore

this shows that the researcher got reliable and accurate information since it was obtained across all the required age groups.

4.5 Determinants of Women Participation

Discussed under this are economic factors, social cultural factors, societal factors, attitude and demographic factors as the determinants of women participation in building and construction industry.

4.5.1 Economic Factors

The study sought to establish economic factors that affect participation of women in building and construction industry in Central Division Isiolo County. The respondents were requested to indicate the extent to which economic factors affect women participation in building and construction industry. The findings were presented in the table 4.6.

Table 4. 6: Economic Factors Influence on Women Participation in Building and Construction Industry

	Frequency	Percent
Low extent	2	1.9
Moderate extent	23	18.9
Great extent	90	73.6
Very great extent	7	5.7
Total	122	100

The respondents indicated that economic factors affects women participation in building and construction industry greatly as shown by 73.6%, moderately as expressed by 18.9%, very greatly as expressed by 5.7% and lowly as shown by 1.9%. This implies that economic factors influence women participation in building and construction industry greatly.

Further the respondents were asked to indicate the extent to which various aspects of economic factors affect women participation in building and construction industry were given to come up with the results in table 4.7.

Table 4. 7: Various Economic Factors Influence on Women Participation in Building and Construction Industry

	Mean	Std Dev.
Land inheritance	2.524	0.737
Occupation	4.143	0.470
Women dependency	4.238	0.429
Financial instability	3.701	0.880

The respondents indicated that women dependency as shown by a mean of 4.238 as well as occupation as shown by a mean of 4.143 greatly affects women participation in building and construction industry. The respondents further indicated that financial instability as shown by a mean of 3.701 greatly affects women participation in building and construction industry while land inheritance as shown by a mean of 2.524 was found to lowly affect women participation in building and construction industry.

4.5.2 Social Cultural Factors

The study sought to determine social cultural factors contributing to participation of women in building and construction industry in Central Division Isiolo County. The respondents were asked to indicate the extent to which social cultural factors affects women participation in building and construction industry. The findings were shown in the table 4.8.

Table 4. 8: Extent of Social Cultural Factors Influence on Women Participation in Building and Construction Industry

	Frequency	Percent
Moderate extent	22	18.4
Great extent	93	76.5
Very great extent	6	5.1
Total	122	100

The respondents indicated that social cultural factors affects women participation in building and construction industry greatly as indicated by 76.5% of the respondents, moderately as indicated by 18.4% of the respondents and very greatly as indicated by 5.1% of the respondents. This makes it clear that social cultural factors greatly affect women participation in building and construction industry. The respondents were further asked to indicate the extent to which various social cultural factors affect women participation in building and construction industry and table 4.8 gives their responses.

Table 4. 9: Influence of Various Social Cultural Factors on Women Participation in Building and Construction Industry

	Mean	Std. Dev.
Traditional customs of local people	3.995	0.979
Discrimination in Appointments	4.286	0.705
Gender Stereotype Factors	2.667	1.047
Religious beliefs	4.133	1.367
Family responsibilities	4.055	0.807

From the findings the respondents indicated that discrimination in appointments as expressed by a mean of 4.286, religious beliefs as expressed by a mean of 4.133 as well as Family responsibilities as expressed by a mean of 4.055 greatly affect women participation in building and construction industry. The respondents also indicated that traditional customs of local people as expressed by a mean of 3.995 greatly affect women participation in building and construction industry while gender stereotype factors as expressed by a mean of 2.667 moderately affect women participation in building and construction industry.

4.5.3 Societal Factors

The study further sought to assesses the influence of societal factors on participation of women in the building and construction industry in Central Division Isiolo County. The respondents were asked to indicate the extent of influence of societal factors on women participation in building and construction industry. The given responses were used to come up with the findings in Table 4.10.

Table 4. 10: Influence of Societal Factors on Women Participation in Building and Construction Industry

	Frequency	Percent
Low extent	11	9.0
Moderate extent	43	35.2
Great extent	52	42.6
Very great extent	16	13.1
Total	122	100.0

From the findings, the respondents indicated that societal factors influence participation of women in the building and construction industry in Central Division Isiolo County in a great extent as shown by 42.6%, in a moderate extent as shown by 35.2%, in a very great extent as shown by 13.1% and in a low extent as shown by 9%. This implies that societal factors affect participation of women in the building and construction industry in Central Division Isiolo County in a great extent.

The respondents were also asked to indicate the extent of influence of various aspects of societal factors on women participation in building and construction industry and the findings were presented on Table 4.11.

Table 4. 11: Influence of Various Societal Factors on Women Participation in Building and Construction Industry

	Mean	Std. Dev.
Family setup	4.098	.866
Child rearing practices	3.664	.829
Level of motivation	2.516	.619
Illiteracy	4.033	.871

From the findings, the respondents indicated that family setup as shown by a mean score of 4.098, Illiteracy as illustrated by a mean of 4.033 and child rearing practices as expressed by a mean of 3.664 influence participation of women in the building and construction industry in Central Division Isiolo County in a great extent. However, the respondents indicated that level of motivation as shown by a mean of 2.516 influence participation of women in the building and construction industry in Central Division Isiolo County in a moderate extent

4.5.4 Women's Attitude

The study sought to establish the influence of attitude on the participation of women in the building and construction industry in Central Division Isiolo County. The respondents were asked to indicate the extent to which attitude influence women participation in building and construction industry. The findings were shown in Table 4.12.

Table 4. 12: Influence of Women Attitude on their Participation in Building and Construction Industry

	Frequency	Percent
Moderate extent	10	8.4
Great extent	81	66.5
Very great extent	33	27.1
Total	122	100

From the findings, the respondents indicated that attitude influence women participation in building and construction industry greatly as expressed by 66.5%, very greatly as illustrated by 27.1% and moderately as shown by 8.4%. This shows that women attitude greatly influences their participation in building and construction industry. The respondents were also asked to indicate the extent to which various aspects of attitude influence women participation in building and construction industry. Table 4.13 shows the results.

Table 4. 13: Extent of Aspects of Attitude Influence on Women Participation in Building and Construction Industry

	Mean	Std. Dev.
Interests, connection with constituents	4.107	.791
Capacity to deal with power, Strategic positioning	3.730	.834
Personal pressures of parliamentary Institutional life pressures	2.410	.542
Interests, connection with constituents	3.934	.925
	4.172	.757

From the findings, the respondents indicated that interests, connection with constituents as illustrated by a mean of 4.172, interests, connection with constituents as shown by a mean of 4.107, personal pressures of parliamentary Institutional life pressures as shown by a mean of 3.934 and capacity to deal with power as indicated by a mean of 3.730 influence women participation in building and construction industry in a great extent. However, the respondents indicated that strategic positioning as shown by a mean of 2.410 influence women participation in building and construction industry in a low extent.

4.5.5 Demographic Factors

The study further sought to assesses the influence of demographic factors on participation of women in the building and construction industry in Central Division Isiolo County. The respondents were asked to indicate the extent of influence of demographic factors on women participation in building and construction industry. The given responses were used to come up with the findings in Table 4.14.

Table 4. 14: Extent of Demographic Factors Influence on Women Participation in the Building and Construction Industry

	Frequency	Percent
Low extent	12	9.8
Moderate extent	22	18.0
Great extent	57	46.7
Very great extent	31	25.4
Total	122	100.0

From the findings, the respondents indicated that demographic factors influence participation of women in the building and construction industry in Central Division Isiolo County in a great extent as shown by 46.7%, in a very great extent as shown by 25.4%, in a moderate extent as shown by 18% and in a low extent as shown by 9.8%. This implies that demographic factors influence participation of women in the building and construction industry in Central Division Isiolo County in a great extent.

Further the respondents were also asked to indicate the extent to which various aspects of demographic factors influence women participation in building and construction industry. Table 4.15 shows the findings.

Table 4. 15: Extent of Various Demographic Aspects Influence on Women Participation in the Building and Construction Industry

	Mean	Std. Dev.
Level of education	2.459	.563
Marital status	3.582	.601
Age	4.139	.764
Accessibility to information Training in projects	3.869	.862
Level of education	4.213	.795

From the findings, the respondents indicated that level of education as shown by a mean of 4.213, age as expressed by a mean of 4.139, accessibility to information Training in projects as indicated by a mean of 3.869 and marital status as illustrated by a mean of 3.582 influence women participation in building and construction industry in a great extent. The respondents however indicated that level of education as shown by a mean of 2.459 influence women participation in building and construction industry in a low extent.

4.5.6 Women Participation in Building and Construction Industry

The researcher asked the respondents to indicate the trend of the various aspects of women participation in building and construction industry for the last five years. Their responses were as shown in table 4.16.

Table 4. 16: Aspects of Women Participation in Building and Construction Industry

	Mean	Std Dev.
Women's contribution	3.952	1.099
Level of involvement	3.995	0.979
Policy-making	4.286	0.706
Planning and implementation of building projects	3.113	1.014
Decision making	3.968	0.652
Formulation and management of Strategies	4.355	0.575

The results reveal that formulation and management of strategies as illustrated by mean score of 4.3548, policy-making as illustrated by mean score of 4.286, level of involvement as illustrated by mean score of 3.995, women's contribution as illustrated by mean score of 3.952 and decision making as illustrated by mean score of 3.968 had improved while

planning and implementation of project as illustrated by mean score of 3.113 had been constant.

4.6 Multiple Regression Analysis

This was applied to determine the relative importance of economic factors, social cultural factors, societal factors, women’s attitude and demographic factors with respect to the Participation of women in building and construction industry. The findings were presented in Table 4.17, 4.18 and 4.19.

Table 4. 17: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.841	0.708	0.695	1.517

The outcome of table 4.17 found that adjusted R-Square value (coefficient of determination) is 0.695, which indicates that the independent variables (economic factors, social cultural factors, societal factors, women’s attitude and demographic factors) explain 69.5% of the variation in the dependent variable (Participation of women in building and construction industry). This implies that there are other factors that affects the Participation of women in building and construction industry attributed to 30.5% unexplained.

Table 4. 18: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	668.11	5	133.622	56.136	.000
	Residual	276.12	116	2.380		
Total		944.23	121			

The results shown in Table 4.18 revealed that p-value was 0.000 and F calculated was 56.136. Since the p-value was less than 0.05 and F-calculated was greater than F-critical (2.2984), then the overall model was statistically significant.

Model coefficients provide unstandardized and standardized coefficients to explain the direction of the regression model and to establish the level of significance of the study variables. The results are captured in Table 4.19.

Table 4. 19: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.951	0.217		4.382	.000

Economic Factors	0.882	0.352	0.913	2.506	.014
Social Cultural Factors	0.633	0.281	0.717	2.253	.026
Societal Factors	0.799	0.196	0.834	4.077	.000
Women's Attitude	0.713	0.233	0.738	3.060	.003
Demographic Factors	0.576	0.204	0.659	2.824	.006

As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon$) becomes:

$$Y = 0.951 + 0.882X_1 + 0.633X_2 + 0.799X_3 + 0.713X_4 + 0.576X_5$$

The findings showed that if all factors (economic factors, social cultural factors, societal factors, women's attitude and demographic factors) were held constant at zero Participation of women in building and construction industry will be 0.951. The findings presented also show that taking all other independent variables at zero, a unit increase in the economic factors would lead to a 0.882 increase in the scores of participation of women in building and construction industry. This variable was significant since the p-value 0.014 was less than 0.05.

The findings also show that a unit increase in the score of social cultural factors would lead to a 0.633 increase in the score of participation of women in building and construction industry. This variable was significant since $0.025 < 0.05$. Further, the findings show that a unit increases in the scores of societal factors would lead to a 0.799 significant increase in the score of participation of women in building and construction industry since p-value (0.000) was less than 0.05.

The study also found that a unit increase in the score of women's attitude would significantly lead to a 0.713 increase in the score of participation of women in building and construction industry since p-value (0.003) was less than 0.05. Moreover, the study revealed that a unit change in demographic factors would significantly change the participation of women in building and construction industry by 0.576 since the p-value (0.006) was less than 0.05.

Overall, it was established that economic factors had the greatest effect on the participation of women in building and construction industry, followed by societal factors then women's attitude then social cultural factors while demographic factors had the least effect to the participation of women in building and construction industry.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn are focused on addressing the objective of the study.

5.2 Summary of the Findings

5.2.1 Economic Factors

The study sought to establish economic factors that affect participation of women in building and construction industry. The study found that economic factors influence women participation in building and construction industry greatly. The findings indicated that women dependency as well as occupation greatly affects women participation in building and construction industry. The study further indicated that financial instability greatly affects women participation in building and construction industry while land inheritance was found to lowly affect women participation in building and construction industry.

5.2.2 Social Cultural Factors

The study sought to determine social cultural factors contributing to participation of women in building and construction industry. The study found that social cultural factors greatly affect women participation in building and construction industry. The study found that discrimination in appointments, religious beliefs as well as Family responsibilities greatly affect women participation in building and construction industry. The study further found traditional customs of local people greatly affect women participation in building and construction industry while gender stereotype factors moderately affect women participation in building and construction industry.

5.2.3 Societal Factors

The study further sought to assesses the influence of societal factors on participation of women in the building and construction industry in Central Division Isiolo County. The study

found that societal factors affect participation of women in the building and construction industry in Central Division Isiolo County in a great extent. The study also found that family setup, Illiteracy and child rearing practices influence participation of women in the building and construction industry in Central Division Isiolo County in a great extent and level of motivation was found to influence participation of women in the building and construction industry in Central Division Isiolo County in a moderate extent

5.2.4 Women's Attitude

The study sought to establish the influence of attitude on the participation of women in the building and construction industry in Central Division Isiolo County. The study found that women attitude greatly influences their participation in building and construction industry. Further it was revealed that interests, connection with constituents, interests, connection with constituents, personal pressures of parliamentary Institutional life pressures and capacity to deal with power influence women participation in building and construction industry in a great extent but strategic positioning was found to influence women participation in building and construction industry in a low extent.

5.2.5 Demographic Factors

The study further sought to assesses the influence of demographic factors on participation of women in the building and construction industry in Central Division Isiolo County. The study found that demographic factors influence participation of women in the building and construction industry in Central Division Isiolo County in a great extent. It was revealed that level of education, age, accessibility to information Training in projects and marital status influence women participation in building and construction industry in a great extent. The study also found that level of education influence women participation in building and construction industry in a low extent.

5.3 Discussion of the Findings

The findings under this were linked to the literature in chapter to ascertain how the findings for this study are related to the findings of other scholars.

5.3.1 Economic Factors

The study sought to establish economic factors that affect participation of women in building and construction industry. The study found that economic factors influence women

participation in building and construction industry greatly. This is in line with Odinga (1967) who argue that formal education was also mostly available to men, which meant that the majority of women remained illiterate and, therefore, could not participate in modern economic transactions.

The findings indicated that women dependency as well as occupation greatly affects women participation in building and construction industry. The study further indicated that financial instability greatly affects women participation in building and construction industry while land inheritance was found to lowly affect women participation in building and construction industry. These findings were in agreement with Mahbub (2000) who noted that women often have fewer opportunities than men to gain access to credit for various reasons, including lack of collateral, an unwillingness to accept household assets as collateral and negative perceptions of female entrepreneurs by loan officers.

5.3.2 Social Cultural Factors

The study sought to determine social cultural factors contributing to participation of women in building and construction industry. The study found that social cultural factors greatly affect women participation in building and construction industry. This correlate with Maanda (2008) who argue that maasai women are among the poorest & most marginalized group in Tanzanian Society and their vulnerability is increasing in this unstable economy.

The study found that discrimination in appointments, religious beliefs as well as women's knowledge and insight greatly affect women participation in building and construction industry. The study further found traditional customs of local people greatly affect women participation in building and construction industry while gender stereotype factors moderately affect women participation in building and construction industry. This concurs with Mutongu (2013) who noted that it is very common to see external influence expressed in building and construction industry especially in community leaders such as Chief's, Assistant Chief's or even sometime religion leaders have special interest when powers struggle crops up women tend to withdraw and even weaken their power to influence decision making.

5.2.3 Societal Factors

The study found that societal factors affect participation of women in the building and construction industry in Central Division Isiolo County in a great extent. This is in line with

Hein and Cassirer (2009) who argue that quality leadership presented by women is high since they understand society social issues, since women bear the heavy burden of managing family problems. The experience argument tends to treat women as a homogenous group without acknowledging the economic, social and cultural diversity among them.

The study also found that family setup, Illiteracy and child rearing practices influence participation of women in the building and construction industry in Central Division Isiolo County in a great extent and level of motivation was found to influence participation of women in the building and construction industry in Central Division Isiolo County in a moderate extent. This concurs with McDermott (2002) who argue that women's efforts are often invisible, remaining hidden due to cultural constraints, yet some, especially in the north and west, are open and confident. Some efforts are composed solely of women who deliberately distance themselves from men and the social systems they represent. In Colombia, despite the fact that as many as 30 per cent of the fighters of the Revolutionary Armed Forces of Colombia (FARC) are women, only one woman, Marian Paez, was included among its representatives of official negotiations with the government.

5.2.4 Women's Attitude

The study found that women attitude greatly influences their participation in building and construction industry. Further it was revealed that interests, connection with constituents, interests, connection with constituents, personal pressures of parliamentary Institutional life pressures and capacity to deal with power influence women participation in building and construction industry in a great extent but strategic positioning was found to influence women participation in building and construction industry in a low extent. This agrees with Naser *et al.* (2009) who notes that women to uphold the promise their Effective skills and knowledge in handling and understanding society social issues women, skills and knowledge of campaigning in a male dominated society, the women capacity to deal with power strategic positioning in political parties is a big challenge that is facing women in the political career, capacity to deal with power, strategic positioning in political position

5.2.5 Demographic Factors

The study found that demographic factors influence participation of women in the building and construction industry in Central Division Isiolo County in a great extent. It was revealed

that level of education, age, accessibility to information Training in projects and marital status influence women participation in building and construction industry in a great extent. The study also found that level of education influence women participation in building and construction industry in a low extent. These findings correlate with Mutongu (2013) who notes that construction is a labour intensive as well as craft-based activity and the behaviour of people has an enormous influence upon the organization and performance of construction firms. Sustainable development of construction industry has to concentrate not only on sustainable building technologies and construction materials but also on respectful and considerate labour management strategies.

5.4 Conclusion

The study concluded that economic factors influence women participation in building and construction industry greatly and significantly. The findings deduced that women dependency as well as financial instability greatly affects women participation in building and construction industry while land inheritance was found to lowly affect women participation in building and construction industry.

The study concluded that social cultural factors greatly and positively affect women participation in building and construction industry. The study deduced that discrimination in appointments, religious beliefs traditional customs of local people greatly affect women participation in building and construction industry while gender stereotype factors moderately affect women participation in building and construction industry.

The study further concluded societal factors affect participation of women in the building and construction industry in Central Division Isiolo County significantly and positively. This was attributed to the great effect of family setup, Illiteracy and child rearing practices on participation of women in the building and construction industry in Central Division Isiolo County.

The study also concluded that women attitude greatly influences their participation in building and construction industry positively and significantly. This as a result of the fact that interests, connection with constituents, interests, connection with constituents, personal pressures of parliamentary Institutional life pressures and capacity to deal with power were found to influence women participation in building and construction industry greatly.

The study further concluded that demographic factors influence participation of women in the building and construction industry in Central Division Isiolo County significantly. It was revealed that level of education, age, accessibility to information Training in projects and marital status influence women participation in building and construction industry greatly.

5.5 Recommendations

The study recommends that the Government of Kenya should promote women participation in building and construction industry through enacting laws that specifically address women participation in building and construction industry.

The study recommends that the families should continue supporting women initiatives to be part of buildings and construction industry and also respond positively to the women proposal to participate directly or indirectly in the buildings and construction activities. This is likely to encourage more women to participate in the buildings and construction industry.

The study recommends that the local communities should also embrace women's effort to participate in the in building and construction industry at the community level by giving women a chance to be selected as workers and also building and construction project managers. This will encourage many women to have an incentive to participate more in building and construction industry.

The study recommends that the worldwide, the top management should allow more women taking up decision making positions in political, economic and social spheres of life. The building and construction industry in Kenya particularly, should encourage women taking up positions in the higher rungs of management as women's participation in leadership is important to a country's economic growth.

The study recommends that the government should Support women in learning, questioning, understanding and challenging the suppression they experience empowers them, but only partially since the empowerment of women through literacy learning is only one important part of the encouragement to participate more in the building and construction industry.

The study recommends that there is a need for interpersonal relationships within the workplace to act as a limiting factor to women participation in decision making in the hotel

industry. The workplace is a communication and interaction based industry. These relationships (either developed or developing) can be problematic or positive.

The study recommends that top management to protect women at the working places. Commonly, some women go through harassment, discrimination, biased opinions and other derogatory experiences. These experiences have a significant effect on decision making by women in the building and construction industry because they instill fear to those affected who may choose to keep quiet to safeguard their position in the industry.

Finally, this study recommends that women should be more aggressive and assertive in their roles in the hotel industry so as to compete with their male counterparts. Women should be asking for promotions directly from their managers to enable them rise up the career ladder in the building and construction industry. Moreover, it is important that women build on their self-esteem and confidence levels so as to avoid intimidation in the workplaces.

5.6 Recommendations for Further Research

A similar study should also be done on other counties since level and determinants of women participation in building and construction varies in different counties. Further, another study should be done to investigate the role of the government in improving the working conditions of women in the building and construction industry.

Far from the building and construction industry, another study needs to be done on factors influencing women participation in the implementation of peace building strategies and on factors influencing the level of women participation, in community development projects.

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APPENDICES

Appendix I: Letter of Transmittal

WASO SECONDARY SCHOOL

P O BOX 755-60300

ISIOLO

COUNTY COMMISSIONER

ISIOLO COUNTY

P.O Box 56-60300

ISIOLO

Dear Sir/ Madam,

RE: ACADEMIC RESEARCH PROJECT

I am a Master of Arts in Project Planning and Management student at University Of Nairobi. I wish to conduct a research entitled Determinants of Women Participation in Building and Construction Industry Central Division Isiolo County, Kenya. A questionnaire has been designed and will be used to gather relevant information to address the research objective of the study. The purpose of writing to you is to kindly request you to grant me permission to collect information on this important subject from your county.

Please note that the study will be conducted as an academic research and the information provided will be treated in strict confidence. Strict ethical principles will be observed to ensure confidentiality and the study outcomes and reports will not include reference to any individuals.

Your acceptance will be highly appreciated.

Yours faithfully,

ALICE KAIRUTHI IKIAO

Appendix II: Research Questionnaire

This questionnaire is to collect data for purely academic purposes. The study seeks to investigate the *Determinants of Women Participation in Building and Construction Industry Central Division Isiolo County, Kenya*. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

Answer all questions as indicated by either filling in the blank or ticking the option that applies.

SECTION A: DEMOGRAPHIC INFORMATION

SECTION A: Background Information (Please tick (√) appropriate answer)

- 1) Please indicate your gender: Female [] Male []
- 2) For how long have you been working in building and construction industry?
Less than 3 years [] 3 to 9 years []
9 to 12 years [] Above 12 years []
- 3) State your highest level of education
Certificate [] Diploma [] Degree [] Masters [] PhD []
Others (Specify) -----
- 4) Please Indicate your age bracket 20-30 yrs [] 31-40 yrs []
41-50 yrs [] 51 – 60 []

Economic Factors

- 5) To what extent do economic factors affect the participation of women in the building and construction industry in Central Division Isiolo County?
Not at all [] Low extent []
Moderate extent [] Great extent []
Very great extent []
- 6) To what extent do the following affect participation of women in the building and construction industry in Central Division Isiolo County?

	Very great extent	Great extent	Moderate extent	Low extent	Not at all
Land inheritance					
Occupation					
Women dependency					
Financial instability					

7) In your view how do the Economic Factors affect participation of women in the building and construction industry in Central Division Isiolo County?

.....

Social Cultural Factors

8) To what extent do social cultural factors affect participation of women in the building and construction industry in Central Division Isiolo County?

- Not at all []
- Low extent []
- Moderate extent []
- Great extent []
- Very great extent []

9) To what extent do the following affect participation of women in the building and construction industry in Central Division Isiolo County?

	Very great extent	Great extent	Moderate extent	Low extent	Not at all
Traditional customs of local people					
Gender Stereotype Factors					
Discrimination in Appointments					
Religious beliefs					
Family responsibilities					

10) In what way do social cultural factors affect participation of women in the building and construction industry in Central Division Isiolo County?

.....
.....
.....

Societal factors

11) To what extent does societal factors affect participation of women in the building and construction industry in Garba Tula Sub County Isiolo County?

- Not at all [] Low extent []
 Moderate extent [] Great extent [] Very great extent []

12) To what extent do the following affect participation of women in the building and construction industry in Garba Tula Sub County Isiolo County?

	Very great extent	Great extent	Moderate extent	Low extent	Not at all
Family setup					
Child rearing practices					
Level of motivation					
Illiteracy					

13) In what way does societal factors affect participation of women in the building and construction industry in Garba Tula Sub County Isiolo County?

.....

Attitude

14) To what extent does attitude affect participation of women in the building and construction industry in Garba Tula Sub County Isiolo County?

- Not at all []
 Low extent []
 Moderate extent []
 Great extent []
 Very great extent []

15) To what extent do the following affect participation of women in the building and construction industry in Garba Tula Sub County Isiolo County?

	Very great extent	Great extent	Moderate extent	Low extent	Not at all
Interests, connection with constituents					

Capacity to deal with power,					
Strategic positioning					
Personal pressures of parliamentary Institutional life pressures					
Interests, connection with constituents					

16) In your view how does education participation of women in the building and construction industry in Central Division Isiolo County?

.....

Demographic Factors

17) To what extent does demographic factors affect participation of women in the building and construction industry in Garba Tula Sub County Isiolo County?

- Not at all []
- Low extent []
- Moderate extent []
- Great extent []
- Very great extent []

18) To what extent do the following affect participation of women in the building and construction industry in Garba Tula Sub County Isiolo County?

	Very great extent	Great extent	Moderate extent	Low extent	Not at all
Level of education					
Marital status					
Age					
Accessibility to information Training in projects					
Level of education					

19) In your view how does demographic factors of women in the building and construction industry in Central Division Isiolo County?

.....
.....

Participation of Women in Building and Construction Industry

20) What is the trend of the following aspects of participation of women in building and construction industry for the last 5 years? Where, 5 = greatly improved, 4= improved, 3= constant, 2= decreased, 1 = greatly decreased.

	1	2	3	4	5
Women's contribution					
Level of involvement					
Policy-making					
Planning and implementation of project					
Decision making					
Formulation and management of Strategies					

Thank you for participating

Appendix III: Research Work Plan for 2019

Activities	December	January	February	March	April	May
Proposal Writing						
Proposal Presentation						
Data Collection						
Data Analysis						
Report Writing						
Report Submission						

Appendix III: Budget

Item	Quantity	Cost (Kshs.)	Total (Kshs.)
Personnel			
Research assistants	5days	@ 3000	15000.00
Materials			
Photocopy paper	3ream	@ 500	1500.00
Ball pens	1 packet	@50.00	50.00
Foolscap	3 ream	@ 300.00	300.00
Scratch card			1000.00
Internet			1000.00
Data analysis			
Statistical analysis			15000.00
Report Preparation			
Typing			4000.00
Printing			5000.00
Binding			2000.00
Miscellaneous			10000.00
Total			54850.00