

**AN APPRAISAL OF THE CAREER EXPERIENCES OF
PROFESSIONAL WOMEN IN THE NIGERIAN CONSTRUCTION
INDUSTRY**

BY

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MSC/ENV-DES/34530/2012-2013

**DEPARTMENT OF QUANTITY SURVEYING,
FACULTY OF ENVIRONMENTAL DESIGN,
AHMADU BELLO UNIVERSITY, ZARIA,
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SEPTEMBER, 2015

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**DEPARTMENT OF QUANTITY SURVEYING,
FACULTY OF ENVIRONMENTAL DESIGN
AHMADU BELLO UNIVERSITY, ZARIA
NIGERIA**

SEPTEMBER, 2015

DECLARATION

I declare that the work in this Dissertation titled **AN APPRAISAL OF THE CAREER EXPERIENCES OF PROFESSIONAL WOMEN IN THE NIGERIAN CONSTRUCTION INDUSTRY** has been carried out by me in the Department of Quantity Surveying. The information derived from the literature has been duly acknowledged in text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at this or any other institution.

Bukola A. Aluko ó Olokun

Signature

Date

CERTIFICATION

This dissertation titled **AN APPRAISAL OF THE CAREER EXPERIENCES OF PROFESSIONAL WOMEN IN THE NIGERIAN CONSTRUCTION INDUSTRY** by Bukola Adenike Aluko -Olokun meets the regulations governing the award of the degree of Master of Science (Quantity Surveying) of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

Prof. A.D. Ibrahim

Chairman, Supervisory Committee

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Dr. K. J. Adogbo

Member Supervisory Committee

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Dr. Y.M Ibrahim

Head of Quantity Surveying Department

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Date

Prof. A.Z Hassan

Dean, School of Postgraduate Studies

Signature

Date

DEDICATION

Dedicated to God Almighty, the creator of heaven and earth,

To my late Mother, Mrs Florence Titilayo Odumosu,

My loving husband Tumininu and

My wonderful kids, Kolade, Ebunoluwa, Yetunde and Oluwatomisin

ACKNOWLEDGEMENTS

My soul proclaims the greatness of the Lord; my spirit rejoices in my Saviour. For He has looked upon his handmaid's lowliness; behold, from now on will all ages call me blessed. The mighty One has done great things for me, and Holy is His name'.

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My success story will not be complete without mentioning the support and comradeship enjoyed from my course mates throughout the period of study. I appreciate the assistance specifically rendered by Gaius Ishaya. May the good Lord reward and be with you. I cannot also forget the Librarian Mall. Falalu Muhammed who gave me access to all the materials needed. Thank you indeed.

Lastly to my husband and kids, I say **“We have done it again and this Research Work is ours”**.

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ABSTRACT

The construction industry by its nature is male dominated and the low level of participation of women within it has attracted a lot of attention globally. In recent years, the industry recorded a slight increase in women participation but this is still insufficient to meet the challenges faced by the Industry on a daily basis. This research therefore investigates the positive career aspect of the few professional women who have made it to the top of their careers within the Nigerian construction industry by exploring their career experiences and expectations, examining the challenges to their participation and their notable and career satisfying moments along their career path. A biographical interview was conducted with forty-five (45) female professionals whose work cuts across all the sectors of the industry. The data collected were analysed using thematic analysis method by grouping the results and organising them according to their opinions on issues discussed. The findings show that their experiences are not peculiar to them because they are women, but generic to both sexes which demystifies the male only image of the industry. It exposed the rare moments, job satisfaction, and excellent achievements which overshadows the challenges faced by the women. The women interviewed were found to have dealt with the challenges in a way that allowed them to balance both work and family commitments, and to them success is not only measured by work achievements alone, but also by achieving success at the family end. The study also found that lack of money stands as a major barrier alongside other challenges which are geographically based and are surmountable. The research recommends that the dissemination of information geared towards the enhancement of the image of the industry as it relates to women is necessary especially one based specifically on the opportunities available and the successes attainable within. It also developed guidelines for enhancing women's career within the Nigerian construction industry.

CHAPTER ONE: INTRODUCTION

1.1 Background to the study

The Construction industry is one of the most important industry sectors in terms of economic growth and employment opportunities (Powell, Hassan, Dainty, and Carter, 2007). According to the findings of Adeyemi, Ojo, Aina and Olanipekun, (2006), the Nigerian Construction industry is responsible for about 7 percent of the fixed capital formation and contributes 3 percent to the gross domestic product (GDP). It is estimated that over three million people work in the industry in various capacities as professionals, administrative staff, operatives and laborers. Thurairajah, Amaratunga, and Haigh, (2007) in their research also reported that in the UK economy, the construction industry contributes approximately a tenth of the nation's gross domestic product and employs 1.9 million people from its work force.

The low level of participation of women within the industry has attracted a lot of attention globally, with majority of contributions from the developed economies (Gale, 1994; Gale and Cartwright, 1995; Dainty, Neale and Bagilhole, 1999; Bennett, Davidson and Gale, 1999; Fielden, Davidson, Gale and Davey, 2000) and the barriers to their advancement was reviewed and summarized by Amaratunga, Haigh, Lee, Shanmugan, and Elvitigala, (2007).

In Nigeria, studies have shown that not all the reasons identified by the foreign researchers were obtainable here. Majority of what was observed were geographically based on the particular culture and nature of our country's socio cultural norms and these hinders the participation of women (Kehinde and Okoli, 2003; Kolawole and Boison, 1999; Adeyemi et al., 2004; Omar and Ogenyi, 2004; Adogbo and Ibrahim, 2010).

There is agreement by the United states Government and their construction industry that the under representation of women is denying the construction sector a valuable pool of labour to

address the growing knowledge and skills capacity and capability challenges it faces on a daily bases (Lu, Sexton, Abbot, and Jones, 2008).

Researchers have been able to recommend ways by which the industry can attract and retain women. (Kolawole and Boison, 1999; Babalola, 2008) and the response to this situation by the government has been a move for a change in form of an ever expanding portfolio of equality and diversity policies introduced to enforce issues related to equal opportunity, such as equal pay, equal promotion opportunity and sex discrimination(Lu et al., 2008). In Nigeria, one of the Millennium Development Goals is also the attainment of gender equality and women empowerment and emancipation (Sunlati, 2008).

In recent years, the Nigerian Construction Industry including its foreign counterpart has recorded a slight increase in the participation of women (Caven, 2008; Babalola, 2008). Even though there is no bench mark for their participation that translates into equal representation, research has identified that some women have been able to gain some degree of satisfaction and optimism in their career progression more than their male counterparts (Bennet et al., 1999).

A study carried out by Kolawole and Boison (1999) shows that women excel in accuracy of perception and in memory, numerical computation, verbal fluency and linguistic abilities generally. Omar and Ogenyi (2004) discovered that Nigerian women are becoming more aware of their personal needs and have come to realize their full potential to contribute to the growth of the nation. These untapped abilities can be well utilized in the construction industry e.g. in Quantity Surveying, hence the need to encourage greater participation as buttressed by Sunlati (2008).

Gale (1994) identified that the few women who have enjoyed a career within the construction industry are fitting in, promoting the process, and seeking to remain within their comfort zones thereby carving out for themselves special niches within the industry.

The point of departure of this research is to look in depth into the lives of these successful career professional women, highlighting their actual positive experiences along their career path and ways by which they have been able to overcome the barriers so as to serve as a means to encourage more women to participate in the industry.

1.2 STATEMENT OF THE RESEARCH PROBLEM

The image of the Construction industry, the mental picture, the decided attitudes and behavior of people in it are built through a combination of information gained from the environment, and relevant past experience (Ginige, Amaratunga and Haigh, 2007).

Although the construction industry in Nigeria and other parts of the world contributes economically to the growth of any nation, a positive picture is not projected as its image. The general image of the industry is equated with site work, and physical labour. It is seen as tedious, dirty, non-technical, non-professional, hazardous, and cyclical and associated with difficult working conditions, and it is still viewed as a highly gendered activity.

Gale (1994) hypothesized that the image of the industry militates against the entry of women. The Author's findings indicated that image played important role and that more information increases the likelihood of both male and female considering a career in the industry.

Dainty et al. (1999) reiterated in their work, that throughout the 1990s, a business case was developed for attracting women to the sector. These according to the report rest on two premises, first that the economy is under- utilizing the range of skills and talents available for

use in the population, and that it is essential for organizations to increase their efficiency and effectiveness by projecting a more pluralistic self-image and thereby widening their pool of potential participants.

Gale (1994) also emphasised that given the generally perceived long-term trend of recruitment problems in the construction industry, the importance of attracting more women to construction makes economic sense, apart from the fundamental issues of women's right and equitable status in society. The study concluded by saying that "it would appear that the industry is fishing in only half an ocean by not recruiting women."

Shanmugam, Amaratunga and Haigh, (2006) in their study surmised that the under-representation of women in the construction industry has been a concern for many years and this is more prominent recently due to the ageing of the current workforce and the potential skill shortage facing the industry. This is crucial as noted by Casey (2005) that women are now entering the construction field in greater numbers and is steadily gaining higher levels of employment and promotions in all areas of the industry. However, the engagement and involvement of professional women in the construction industry is not encouraging enough (Kolade and Kehinde, 2013) and it is unclear which motivational factors by successful career women in the Nigerian construction industry will benefit others in their career.

It is therefore imperative to highlight the positive career experiences of the few successful women whom have been able to surmount all the barriers against their career growth with the intent that such when disseminated could assist in attracting and retaining women within the industry and to buttress the fact that image is linked with reality.

1.3 THE NEED FOR THE STUDY

The researches into women's career in the Nigerian construction industry are few and the recent ones studied their career from the training stage and their organizational commitments. This study addresses the problem of underrepresentation from the professional angle but delving into the actual lived experience of the women and their career satisfying moments and achievements. These when examined is aimed at redeeming the image of the industry as it relates to women. A discussion paper commissioned by the National Association of Women in Construction (NAWIC, 2012) emphasised that efforts are still required in attracting more women into the industry and one of the major barriers that seems to still have a major influence on the recruitment and retention of women within it is the perceived and the projected image which are further exacerbated by the industry as it continues to foster a male only image and remains entrenched in a culture which undermines the value of women (Fielden et al., 2000).

It is therefore necessary and important to attract and retain women in the construction sector by improving the overall image of the industry in order to avoid the "revolving door syndrome" that is attracting people only for them to exit shortly and to maintain the supply chain of women as a workforce within the industry.

According to Ginige et al. (2007), construction needs diversity and the industry may have to recognize and build upon the strength and characteristics of women; this especially applies to Nigeria now that the government is committed towards the attainment of its vision 2020 and the millennium development goals (MDG) (Ofori, 2010). The research further noted that previous efforts at planning and visioning were not sustained and that the history of economic stagnation, declining welfare and social instability, has undermined development for most of the past 30 years.

These therefore means that the capacity of the industry in a developing country such as Nigeria should be enhanced to enable it deliver a higher volume of output to meet the increased demands and initiatives to realize these goals (Ofori, 2007). By so doing skills and capabilities are needed to be harnessed from the entire participant within the industry and to this end recruitment of women in the Construction workforce has been identified as a potential solution to increase the capacity of the industry and to bring diversity to Construction (Ginige et al, 2007).

1.4: AIM AND OBJECTIVES

1.4.1 AIM

The aim of the research is to expose the actual lived career experiences of professional women along their career path in the Nigerian construction industry. Through this knowledge, it should be possible to enhance women's participation and their retention rate within the industry so as to ensure a steady career progression of women in active practice.

1.4.2 OBJECTIVES

The objectives are to:

- i. Examine the challenges to women's participation within the industry and how they were overcome,
- ii. Identify their notable and career satisfying moments along their career path,
- iii. Assess the Career experiences and expectations of women in the Nigerian Construction Industry and
- iv. Develop guidelines for enhancing women's career within the construction industry

1.5: SCOPE AND LIMITATION

1.5.1: SCOPE

The research specifically targeted women who are actively involved in the industry from age 35 years and above. It considered women who are at the pragmatic endurance stage and proceeding to the reinvent contribution phase of their careers. Women at this stage according to career development model by O'Neil and Bilimoria (2005) and White (1995) must have adjusted and continue to adjust to the world of work and, over time, start to make a more tangible contribution to their organizations. The inclusion criteria is all female professionals drawn from Architectural, Quantity Surveying, Engineering and Building sectors of the industry with minimum of five years working experience who are available and willing to participate. The samples of women interviewed for this work were drawn from women practicing in Lagos, Abuja and Kaduna. The exclusion criteria is all those who have not been fully engaged in the profession even though they have the requisite years of practice, those not available such as those who might be on leave and those who might decide not to participate. The result/ findings of the research are limited to the experiences of professional women who are at the top of their careers including those at the mid-level.

1.5.2: LIMITATION

A major limitation of the study is the unwillingness of the respondents to participate fully and to be completely honest due to the interview mode of gathering data. This limitation was reduced by putting the participants at ease by explaining the essence of the interview to them. The face to face interviews were scheduled at times and places convenient for the participants while telephone interview was also carried out on the participants that were willing but could

not make themselves available for a face to face interview. The responses of the participants is largely dependent on the aspect of their careers they might have been exposed to which might not give a true reflection of the construction industry as a whole. In selecting the number of respondents, care was taken to ensure the right size was used that will make the results reliable. Furthermore, the study assumed that the men are comfortable with their careers within the industry such that the positive aspect of their careers including other positive areas within the industry as a whole were not considered.

CHAPTER TWO: REVIEW OF WOMEN'S PARTICIPATION IN THE CONSTRUCTION INDUSTRY

2.1 Definition of the Construction Industry

The construction industry is a sector of the economy that transforms various resources into physical economic and social infrastructure necessary for socio-economic development. It embraces the process by which the said physical infrastructure are planned, designed, procured, constructed or produced, altered, repaired, maintained, and demolished. The constructed infrastructure includes:

- Buildings
- Transportation systems and facilities which are airports, harbors, highways, subways, bridges, railroads, transit systems, pipelines and transmission and power lines.
- Structures for fluid containment, control and distribution such as water treatment and distribution, sewage collection and treatment distribution systems, sedimentation lagoons, dams, and irrigation and canal systems.
- Underground structures, such as tunnels and mines.

The industry comprises of organization and persons who include companies, firms and individuals working as consultants, main contractors and sub-contractors, material and component producers, plant and equipment suppliers, builder and merchants. The industry has a close relationship with clients and financiers. The Government is involved in the industry as purchaser (client), financier, regulator and operator (The Construction Industry Policy).

2.2 Women in the Nigerian Construction Industry

It can be said that in Nigeria today, women are truly weaving themselves into the fabric of the entire industry through enrolments in Quantity Surveying, Architecture, Building, Engineering and Construction education programs and being in positions of significance in design and construction firms (Babalola, 2008). Unlike before, Nigerian women are changing the face of the economy. They have overcome the barriers and are no longer bench ó warming spectators even in the midst of the male dominated professional fields. Omar and Ogenyi (2004) discovered that Nigerian women are becoming more aware of their full potential to contribute to the growth of the nation. However, the engagement and involvement of professional women in the construction industry is not encouraging enough. Efforts are still required in attracting more women into the industry.

2.2.1 Statistics of women in the Nigerian Construction Industry

National Bureau of Statistics (2008) report shows that from 2001 to 2005, the female population was 49.9% out of the nation's population, while the growth rate from 1999 to 2006 was pegged at 3.5%. The report also shows the statistics of Data on Employment in the Building and Construction sector which indicates that as at December 2007, the population of unemployed female in Nigeria is at an average of 43.2% out of the entire population and these women fall within the age bracket of 25 to 44 years and they form the bulk of an untapped resource within the Nigerian economy. Adeyemi et al. (2006) revealed that women constitute only 16.3 percent of the workforce in the Nigerian construction industry, of which 50 percent are administrative staff, 10 percent employed as professional and management staff, and 2.5 percent as craftswomen. Shanmugam, Amaratunga and Haigh, (2006) also noted that the under-representation of women in the construction industry has been a concern

for many years and has attracted both government and industry's wide attention. This is more prominent recently due to the ageing of the current workforce and the potential skill shortage facing the industry. The Equal Opportunities Commission (EOC, 2005) opined that breaking gender barriers will help solve skill shortages. Therefore, construction employers need to access a wider pool of talent from a more diverse range of people in terms of gender in order to recruit and develop a high quality workforce that is motivated and skilled to meet growing construction needs. Hence, female professionals are needed at all levels, in management, design, trade skills and in all the various parts of the supply chain.

2.2.2 Women Career Pathways

The construction industry varies in its constituent elements and components; it encompasses a wide range of activities and products. It is broken down into various sectors such as oil and gas, civil and heavy engineering, manufacturing and fabricating sectors etc. According to Chartered Institute of Building (CIOB, 2006) it now makes use of new partnering arrangements and procurement strategies with mechanized and prefabricated standard products. Gurjao (2006) noted that there are improvements in supply chain management and quality assurance with new innovations being the order of the day. Different skills requirement are evolving due to industrial changes gradually moving from manual labour towards white-collar / technical work. Women can be effectively utilized in these areas and a Career pattern can be formed.



Tab

le 2.1 Sources :(Chartered Institute of Building, 2006)

2.3 Barriers experienced by women in the construction industry.

Barriers are defined as something that keeps a potential competitor from entering a particular market and in this context; the barriers that prevent the entry of women into the construction industry begin from early socialization and education, and continue throughout training and recruitment. These barriers are further exacerbated by the industry as it continues to foster a male only image and remains entrenched in a culture which undermines the value of women (Fielden et al., 2000). The major barriers identified from research militating against the entry

and retention of women within the construction industry as summarized by Amaratunga et al. (2007) is as follows:

- Family commitments
- Male dominated training courses
- Recruitment practices
- Image of the industry
- Culture and environment
- Career knowledge
- Discrimination and harassment
- Lack of role models and mentors

The resilience and the spirit of determination exhibited by professional women and the fact that leadership traits are not genetically acquired and have nothing to do with gender have helped women in combating the above listed barriers to a certain extent (Babalola, 2008). Research has identified that some women have been able to gain some degree of satisfaction and optimism in their career progression more than their male counterpart (Bennet et al., 1999). This was further buttressed by Casey (2005) that women are now entering the construction field in greater numbers and is steadily gaining higher levels of employment and promotions in all areas of the industry. However, the engagement and involvement of professional women in the construction industry is not encouraging enough (Kolade and Kehinde, 2013). In a discussion paper commissioned by the National Association of Women in Construction (NAWIC, 2012) emphasized that efforts are still required in attracting more women into the industry and the major barriers that seems to still have a major influence on the recruitment and retention of women within it and which relates closely to this research work are further discussed as follows:

2.3.1 Nature of the Industry

The Construction industry is male dominated and highly fragmented with a large number of small sized firms with very few numbers of large companies. The products of the industry have unique characteristics which differentiate them from other industries, their location is fixed, geographical distribution widespread, and they are large, heavy one-off and custom built (Hildebrandt and Cannon, 1989).

Research has shown that the male dominated nature of the construction industry represent a significant barrier to female recruitment, their career progression and retention, although their number within the workforce is gradually increasing, their participation is still low (Amaratunga et al., 2006). Gurjao (2006) in a closer look at construction ó a changing industry asserted that the nature of the construction industry has changed significantly in terms of process and technology, the industry is becoming highly mechanized and no longer dependent on brute strength but determination and commitment to succeed. Different skill requirements and a larger workforce are necessitated due to the industrial changes taking place.

2.3.2 Image of the Construction Industry

Image is the mental picture, which is created through information gained from the external environment and processed internally with relevant past experiences on a certain aspect (Ginige et al., 2007). The predominant image of construction is that of a male-dominated industry requiring brute strength and a good tolerance for outdoor conditions, inclement weather and bad language (Agapiou, 2002). In fact, people believe that the industry involves masculine trades such as bricklaying, carpentry, plumbing, plastering, and so on only suitable

for men. It is principally this image that makes the women uninterested in the industry. The research conducted by Fielden et al. (2001), concluded that the image of the industry is symbolized by "the builders bum" or "Stratford smile", therefore the image of the construction industry is an important factor in the career selection process of young men and women. This research built upon that conducted by Gale in (1994) which investigated whether there is a difference between the perceived image of the industry and recruitment to the industry by sex. One of the two main hypotheses was that the image of the industry militates against the entry of women. The findings indicated that image played important role and that more information increases the likelihood of both male and female considering a career in the industry.

There seem to be an apparent confusion between the projected image of the construction industry and the image held by the people outside of the industry. This distinction can be easily made in theory, but may be difficult to differentiate and measure in practice. The construction industry's poor public image is synonymous with high cost, low quality and chaotic working practices. Women therefore tend to choose not to enter an industry that fails to acknowledge their ability, and all too often places them in a hostile and threatening environment (Gurjao, 2006). Gale (1994) also expressed this as an ethical or moral issue: "It is not right to encourage girls into an occupation when the reality is that women can't get on in that occupation or the nature of the work environment is unfriendly to women."

The perception and image of the industry is still rooted in the past despite years of positive image campaign (Jones, 2005). The existing image of the construction industry forms a strong barrier for attracting women into the industry. Therefore, there is a need to change the image to focus on the good features of the industry. It is extremely important to enhance the flow of good news to tell. Smith (2002) in his research indicated that the construction industry in general suffers from a lack of coherent and sustained communication with other

industries including the general public. The study noted that handled sensitively, with a commitment to nurturing understanding between the public and construction staff, proactive and professional community relations by the construction industry will have a profound and positive impact on the general perception of the industry in the society at large.

Working Group 7 of CIB (1996) in their report showed the importance of taking the messages of the industry to the society through different media such as editorial campaigns, national construction week, building an industry focus and exhibitions to enhance the general awareness of the industry in order to achieve a better image. The CIB further recommended that consideration be given to the value of relationship marketing, saying that it is widely accepted that the industry has suffered from confrontational attitudes which are deep-rooted and a major barrier to improving its image.

In order to attract more women into the industry there is a necessity to change the traditional perception that construction is all about manual work, which needs extensive physical strength and tolerance to dust and noise. English (2006) stated that the industry needs to become more of a process industry (incorporating a high level of mechanization and use of plant and equipment) than a craft industry. The construction industry is a complex industry with many sub-sectors such as consultancy, design, manufacturing and supply. The industry is now inclined towards the use of technology and mental capabilities which may be offered by both sexes. As a core industry that adds support and quality to all other industry, construction needs to access a wider pool of talent from a more diverse range of people in terms of age, gender, and ethnic origin in order to recruit and develop a high quality skilled workforce to meet the growing needs of the industry. An effective image campaign targeted at women in various sectors especially those returning to work from career breaks and those changing careers is therefore needed and should be emphasized (Gurjao, 2006).

2.3.3 Culture of the industry

Bagilhole et al. (2000) noted that the construction workplace has been described as amongst the most chauvinistic in the UK, with an extremely macho culture which is hostile and discriminatory towards women. In Nigeria, Ademoroti (1993) also argued that employment opportunities for women is highly influenced by employer's opinion towards their ability and potential to cope with the rigors of the job due to the society's assumed traditional role for them as wives /mothers. In the Northern part of Nigeria, some women are still kept in purdah and some are rarely allowed to speak their minds because of the existing perception of their losing their dignity and being unduly tempted. The prevalence culture of male-dominance or overt masculine image, long hours on sites, inclement weather, inappropriate language and unwelcome sexual conduct also makes the profession unattractive to women. Bagilhole et al. (2000); Dainty et al. (1999, 2000) in their study of the disparate progression dynamics of men and women in the construction industry came up with findings which indicated that men gained promotion rapidly more than women while the progression of women is inhibited by a culture of the industry which is exclusionary and discriminatory of women in their work environment. This has led to the likelihood of women leaving for careers in a less hostile industry. The long hour working culture makes it difficult for female employees to cope with childcare responsibilities and work ó life balance becomes a barrier to remaining in the sector (Dainty and Lingard, 2006). However, faced with these barriers, research has identified that some women have been able to achieve career satisfaction more than their male counterparts (Nicholson and West, 1988) as they remain in a competitive and conflict riddled environment.

2.3.4 Lack of Role Models and Mentors

For women to be successfully recruited and retained in the construction industry, they need to be supported, coached and encouraged (Amaratunga et al., 2007). Researchers such as Davidson (1987); Lewis and Cooper (1989), opine that the advancement of women in their places of work are inhibited by non-availability of appropriate role models and mentors. Because of perceived domestic commitments and responsibilities faced by women, they are often assumed to be less committed to their organization. They are consequently likely to be overlooked in the promotion stakes and are less accessible to training opportunities than their male counterpart (Gale and Cartwright, 1995). This situation as observed by Dainty et al. (1999) allowed men to strengthen their organizational power which could consequently be used to affect the career of women negatively. In their summation, the only way the women could liberate themselves was to resign from the organization. This action however has led to having fewer women in the senior cadre to act as role models for potential female entrants and thus the underachievement of women could be seen to have contributed immensely to their under-representation.

To this end, mentoring has been said to be critical in getting women interested in the industry. According to Hoffman et al. (1999) role models both in the education sector and practice of the various professions are crucial in encouraging a greater participation of women in the construction industry. The successful women in the profession are said to be a greater challenge to influence the society's outlook and perception of the industry.

2.3.5 Male Dominated Training Courses

Kolade and Kehinde (2012) noted in their research work that the fact that admission to Nigerian higher institutions to study project/construction management related courses (such as civil engineering, building technology, quantity surveying, architecture, land surveying,

project management, estate management) is not gender biased but practically, the core courses and training provided by institutions, training organizations and employers create a whole host of problems for women arising from the male-dominated environment and masculine culture (Gale, 1994). Kolawole and Boison (1999) also identified some of the factors responsible for the low number of women in construction to include among others negative social attitude and low enrolments of female students in primary to tertiary institutions. Imhanlahimi and Eloebhose (2006) examined the factors which militate against women's participation in science and technology in Nigeria and found six key factors:

a. The socialisation process in the Nigerian culture where girls are protected and discouraged from explorative and risky activities while boys are encouraged to be assertive and challenge their mental powers. This affects the children's personality and subsequent attitude towards the science fields which are considered mentally tasking.

b. The traditional sex roles expectations which encourage boys to do mentally challenging science subjects and girls are expected to offer softer subjects like home economics which could help them become better housewives. In addition, there are instances where girls are encouraged to opt out of science in preparation for marriage and family obligations.

c. The perceived notion that science subjects are difficult, abstract and masculine while the arts and humanities are more appropriate to females.

d. The role of the schools particularly in the implementation of their curricula. Boys' schools give preference to science and technology while in girls' schools the curricula mandates the study of home economics (this is not taught at all in boys' schools).

e. The attitude of teachers sometimes influences girls' choices of subjects especially if they have one who believes a woman's place is in the kitchen. Such teachers would hardly encourage their female students to study science subjects.

f. The responsibilities of guidance counsellors is to guide students into choosing subjects for which are naturally talented but this role is often carried out with a gender bias. This manifests itself in the misinformation the girls receive that science and technology subjects are masculine and unsuitable for girls.

A survey of students enrolment to project management related disciplines has increased and they have taken the lead in terms of outstanding performance in all areas of specializations; however, only few are found to pursue career in technical areas of construction and they are still less than the men. This is also evidenced in the admissions into Nigerian Universities between 2001 and 2004 as shown in Table 2.2.

Table 2.2 Distribution of Enrolled students in Nigerian Universities by Gender from 1986-2004

Year	Total Enrolment	Male enrolment	% Enrolment	Female enrolment	% Enrolment
1986	135,783.00	102,244.60	75.3	33,538.40	24.7
1987	150,613.00	111,001.80	73.7	39,611.20	26.3
1988	219,119.00	166,530.40	76	52,588.60	24
1989	307,702.00	215,391.40	70	92,310.60	30
1990	326,557.00	228,589.90	70	97,967.10	30
1991	368,897.00	239,783.00	65	129,113.90	35
1992	376,122.00	252,001.70	67	124,120.30	33
1993	383,488.00	258,087.40	67.3	125,400.60	32.7
1994	236,261.00	161,366.30	68.3	74,894.74	31.7
1995	391,035.00	256,910.00	65.7	134,125.00	34.3
1996	689,619.00	436,528.80	63.3	253,090.20	36.7
1997	862,023.00	526,696.10	61.1	335,326.90	38.9
1998	941,329.00	545,970.80	58	395,358.20	42
1999	983,689.00	550,865.80	56	432,823.20	44
2000	1,032,873.00	568,080.20	55	464,792.80	45
2001	1,136,160.00	624,888.00	55	511,272.00	45
2002	1,249,776.00	687,376.80	55	562,399.20	45
2003	1,274,772.00	726,620.00	57	548,152.00	43
2004	417,281.00	237,850	57	179,431	43

Note: Provisional Data
Source: Adogbo, 2013

2.3.6 Recruitment Practices

Recruitment problems are a long term trend within the construction industry. The terms and conditions within the construction industry were generally poor irrespective of any particular gender (Amaratunga et al., 2000). Through the study undertaken by Fielden et al. (2001) it was reported that the industry fails to provide decent wages, pensions and other staff benefits especially at craft level. Dainty et al (2000) found out that male managers use discriminatory recruitment practices which put many women off applying for new positions with contracting

organisations. These gave rise to the importance of attracting more women to construction despite the fundamental issues of women's right and their equitable status in the society (Gale, 1994).

Women seeking employment or apprenticeship opportunities in the construction industry often face employers who are unwilling to hire women or support them in completing apprenticeships (Kolade and Kehinde, 2012) and it is universally acknowledged that women face discrimination and stereotyping in recruitment. The traditional gender split in the construction industry pattern of employment, i.e. segregation of women into traditional roles, 'the glass wall', with women being more likely to work in administrative and secretarial, personal services and sales occupations, and men more likely to work in manufacturing and production, has persisted for a long time (Gurjao, 2006). The Author surmised that women are much more likely than men to work in public administration, education and health, which account for 41 per cent of women's employment and only 15 per cent of men's, and distribution, hotels and catering, which account for another 23 per cent in comparison to 18 per cent of men's employment.

Gale (1994) noted that the cyclical nature of construction output owing to its sensitivity to the underlying economic cycle means that the question of recruitment goes on and off the agenda and so too does the question of recruiting a higher proportion of women. The changeable nature of the construction industry was also felt to be responsible for high levels of unemployment (Amaratunga et al., 2000). Hossain and Kusakabe (2005) found that recruitment process is a major barrier identified by technical women in entering the construction industry. Employers prefer men for tedious, dirty, hazardous tasks with long working hours on sites, also even for tasks such as designing, cost estimation, mapping and documentation. The general believe is that women need a reasonable level of strength and

fitness for some job requiring above average upper body strength for lifting and heavy operations.

Some employers believe that construction is unsuitable for women and it manifests in the recruitment process where employment is often informal and through personal contacts (Dainty et al., 2000). Surveys of project/construction firms show a few women on staff list and in some cases they are mostly engaged as casuals or labourers (Kolade and Kehinde, 2012). Kehinde and Okoli (2003) also noted that part of the problem of recruitment faced by women was their perception of their employment potential and traditional perceptions of women's role and career outside the home. It has also been reported that the culture of construction organisations permits informal recruitment practices; these can include advertisements and brochures depicting male values and interests, unstructured interviews, discriminatory selection criteria and sexist attitudes (Fielden et al, 2000). According to Dainty et al. (2000) managers manipulate the culture in an organisation through: *“recruitment (control over the types of people that gain entry to the organisation), promotions and demotions (control over who reaches positions of influence within the organisation), induction and socialisation (a strong influence over the social dynamics within the organisation), codes of practice, mission statements and reward/appraisal systems”*.

2.3.7 Family Commitments

Work-family conflict is defined as a form of inter-role conflict whereby job and family demands cannot be met simultaneously and is an on-going problem for women with career aspirations (Wentling, 1996). According to ILO (2000), family commitments and responsibility is an important feature of professions and especially construction work, since it sometimes requires long hours on site to gain experience and recognition, leading to women

who want both family and a career having to juggle heavy responsibility in both domains. There is a strong culture within the industry that working long hours demonstrates employment commitment (Sutherland and Davidson, 1993), and a lack of compliance with such cultural norms can adversely impact promotion prospects and even future job security (Feilden et al., 1999). The conflict between work and family obligations, that many construction professionals experience, is more acute for women than for men (Amaratunga et al., 2007).

The construction industry fails to appreciate some of the issues associated with combining work and family commitment (Gale, 1994b), and organizations tend to treat family and work as completely separate. Evetts (1993) found that many women in construction did not feel that management was an appropriate career for them because of the conflict between family and work commitments. Those who did pursue such a path tended to adopt a male attitude towards career development, with domestic responsibilities taking a back seat to work responsibilities (Feilden et al., 1999). Through a study done by Lingard and Lin (2004) it was suggested that women in construction adopt an 'either/or' approach to career and family. Also it is possible that women's perception of the need to make a choice between work and family means that women who choose to have a family, develop lower expectations of the work experience and, consequently, the work-family conflict does not negatively impact upon their organisational commitments. However, women who expect to balance both family and career success in the construction industry may experience significant difficulties. (Lingard and Lin, 2004).

2.4 Participation of women in the construction industry.

For some years now, research has identified that there is an influx of women into professions like law, accountancy and medicine, all of which require high level qualifications but are

considered attractive because of its perceived high level of social status, today, it can be said that the ratio of men to women in these sectors are almost equal but that cannot be said of the various sectors within the construction industry (Gurjao, 2006).

The participation of women within the construction industry is gradually increasing but they are still grossly under-represented (Dainty et al., 2000). In Nigeria Kehinde and Okoli (2003) noted that between 1980 ó 1992 there was an increase in the enrollment of females in construction related courses, but only a few end up making a career out of it. He stated further that the enrollment figure of females into the university in the Faculty of Arts and Humanities rose between 29% - 36.6%, while that of Engineering and Environmental studies is still below average. Adogbo (2014) in her research also noted the distribution of enrolled students in the Nigerian Universities by gender from 1986 ó 2004. Though outnumbered by men, the female enrollment rose from 24.7% to 43%. The largest number of female participation has been found in professional positions as recorded in the UK where 5 percent of women make up the civil engineering workforce and 9 percent in Australia as against 2.7 in 1980 (Francis, 2007; Watts, 2009). Dainty et al. (1999) reiterated in their work, that throughout the 1990s, a business case was developed for attracting women to the sector. These according to their report rest on two premises, first that the economy is under- utilizing the range of skills and talents available for use in the population, and that it is essential for organizations to increase their efficiency and effectiveness by projecting a more pluralistic self-image and thereby widening their pool of potential customers.

Gale (1994) also emphasized that given the generally perceived long-term trend of recruitment problems in the construction industry, the importance of attracting more women to construction makes economic sense, apart from the fundamental issues of women's right and equitable status in society. The author concluded by saying that 'it would appear that the industry is fishing in only half an ocean by not recruiting women' and that the few women

who have enjoyed a career within the construction industry are fitting in, promoting the process, and seeking to remain within their comfort zones thereby carving out for themselves special niches within the industry.

2.5 Female Gender perspectives (Natural Abilities)

The concept of self as presented by Baron and Byrne (2000) is a cognitive framework that determines how we process information about ourselves including our physical attributes, personality traits, roles, motives, emotional states, self ó evaluations and abilities. According to Kolawole and Boison (1999) in relation to natural abilities of men and women, surmised that men have been found to be superior in speed and coordination of gross bodily movement and that women also excel in speed and accuracy of perception, memory, numerical computation, verbal fluency and linguistic abilities generally. Because women are commonly associated with occupations such as secretaries, personnel managers and nurses etc., they are usually under pressure to conform to their role expectation especially when the society frowns at women who are involved in occupations deemed to be masculine in nature. The intensity of such pressures made women to accept the generalized expectations as part of their own identity (Baum, Fisher and Singer, 1985; Newman and Newman, 1991; Rasmussen, 2001). The aim of the research conducted by Chandra and Loosemore (2004) was to explore the self ó perceptions of women in the construction industry and to place this in perspective by comparing it to female self ó perception in other male and female dominated industries. The result of the study indicated that women in the construction industry emerged positively with the highest overall level of self-esteem. This finding goes to show that the impediments to women's career progression in the construction industry are not as significant a barrier as

portrayed in literature, and the women are overcoming them more objectively than is widely thought.

2.6 Career Progressive Stages

Career development/progression is defined to be the alignment of individual career planning and organizational career management processes to achieve an optimal match of individual and organizational needs (McLagan, 1989). Dainty et al. (2000) investigated the careers of men and women working for large construction companies in order to establish the gender determined influences on women's career progression. Their findings showed that the gender disparity in career development was determined by series of cultural and structural factors alongside the coping strategies of men and women to overcome the career constraints and opportunities as they emerge. The career progressive model of women was further summarized by Lu and Sexton (2010) which according to the research were based on two dominant framework: generic female career development model by O'Neil and Bilimoria (2005, p.170) and Senior female management career development model by White (1995, p.10). The synthesis of the two frameworks is as shown in Table 2.3:

Table 2.3: Successful female career development model

Phase (adapted from Stage (adapted from White 1995))	Description (adapted from White, (1995) OøNeil and Bilmoria, 2005)	
Phase 1: Exploration (before age 24)	Childhood	Character building Developing career-orientation
) living	Early adult transition 17-25 years	Early commitment to an occupation Testing of initial choices about preferences for
getters	Entering the adult world: Mid-20s	Identify diffusion caused by role conflict relation to work and non-work Rejection of the housewife role/separation from Partner, resulting in growth of career sub- identity Among late starters High career centrality among early starters (go-
Phase 2: Idealistic Establishment: Achievement (ages 24-35)	Period of rapid learning and development 23-33 years Early-30s transition: 33-35 years Settling down: 35 years	Seek opportunities to practice chosen occupation/ Profession establishing a reputation as a high achiever Raised awareness of biological clock-decision whether to have children Decision about motherhood resolved Minimum maternity leave Strive towards the achievement of personal goals
Phase 3: Pragmatic endurance (Ages 36 - 45)	Late-30s transition: 38-40 years	Regret lack of children Family-career conflict Move in response to glass ceiling
Phase 4: Reinvent Contribution (ages 46- 60)	Achievement: 40-50 years Maintenance: 50s onwards	Resolution of career and family conflict Rationalize decision not to have children Realization of personal goals Develop greater stability and consolidate Achievements to date Continued growth and success Cycle of expansion and consolidation

Phase 1: Exploration (before age 24): Career choice of women is very much determined by their early socialization. The factors include family background, upbringing and role models, educational opportunities and experiences.

Phase 2: Idealistic achievement (ages 24 - 25): This phase starts with the transition from education to work. A proportion of women experience a sense of reality shock. This phase is about adjustment, and thus, the individual's key task is one of orientation to the demands of work. Women in this phase see themselves as being in charge of their careers and are strategically planning how to achieve success.

Phase 3: Pragmatic endurance (ages 36 - 45): Once women have moved through phase 2, they continue to adjust to the world of work and, over time, start to make a more tangible contribution to their organizations. Women in this phase are at an age when family responsibilities are most likely to impact heavily on their careers. There are two alternative stylized outcomes of this stage. Either women find their careers stalling at the middle management level and they no longer seek promotion; or women enter a period of early career success and self-affirmation. The differing outcomes are governed by both opportunities to prove one's capability and by the timetabling of key organizational career stage-stage rites of passage.

Phase 4: Reinvent contribution (ages 46-60): Women in this phase see their career as a chance to make a meaningful contribution in a number of areas. For these women, success relates to recognition, respect and living integrated lives. This process is influenced much more by non-work factors (e.g. marriage, family, life ambitions, work ambitions) compared to their earlier career phases.

2.7 The Leaky Pipe Syndrome

The leaky pipeline is a concept that has been used to refer to the steady attrition of girls and women throughout the formal science and technology system, from primary education to decision making. There are five major barriers to women and girls participation in the industry or -leaksø in the pipeline. These are identified as socio cultural attitudes; education; academic appointments; science and technology professions; development and transfer. Four aspects of the leaky pipeline concerning women in scientific employment in New Research on women, science and higher education outlined by Judith Glover, (2005) cited in Gurjao, 2006 are:

- Qualifying ó getting the qualifications
- Translating ó qualifications into employment
- Persistence - -in employment (retention)
- Advancement - (progression).

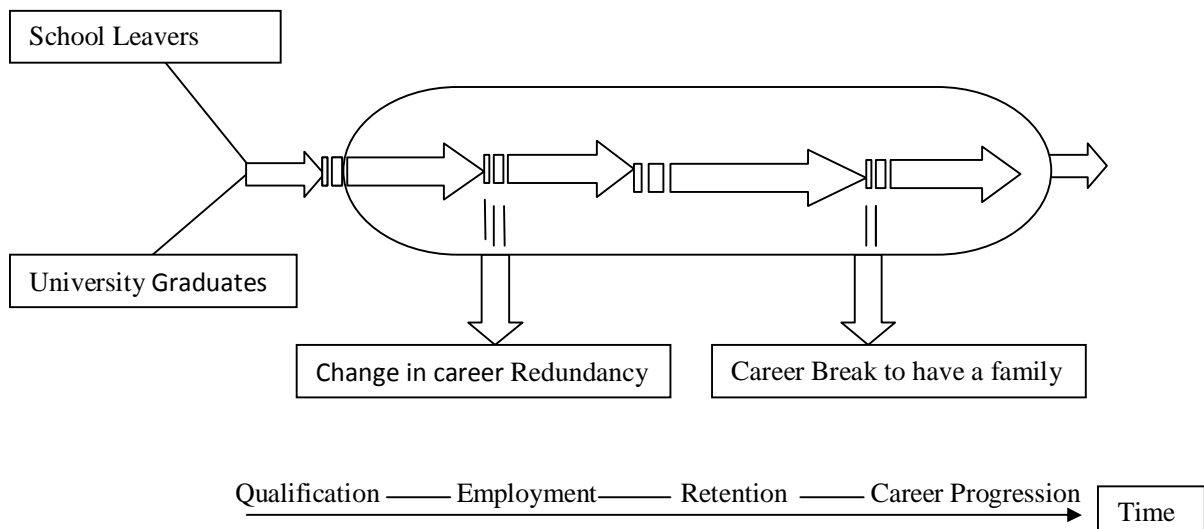


Figure 2.1: δThe Leaky Pipeline δ
Source :(Based on the Salford Study, Gurjao, 2006)

Translating qualifications into employment seems to be the biggest barrier to entry into the construction industry (Link, 2006). Gurjao (2006) in her research reported that about 30,000 women leave their jobs annually on account of poor maternity rights. Both the manufacturing and construction sectors stand out with their lower than average provisions of maternity and child care benefits. Furthermore, maternity benefits when implemented are found to be directly linked to high rates of retention which some companies found cheaper than recruiting and training new staff. The "leaky pipeline," that is the tendency of dropping off the career ladder as a result of policies of firms, may have more to do with the decreasing percentage of women in construction thus contributing to shortage of women in the industry.

2.8 Career Development for Women in Construction

Career development refers to the long term personal and professional growth of individuals (London, 1993). The availability of effective career development practices not only heightens the growth and self esteem of employees for them to utilize skills and knowledge, it could also serve as an important link to retain good employees to stay with the organization (Eisenberger et al, 1986). The decision for employees to stay or leave might depend on whether or not they gain support at work and personal growth. This requires employers to provide resources, tools, and the appropriate environment to ensure continued self development. Therefore, career development is about the development of employees. This is beneficial for both the individual and the organization. Effective career development programs enhance individual work performance by continuously learning and adapting, while the organization offers favourable developmental relationships with their employees (Foong-ming, 2008). Career development plan helps the employee to reach their full potentials and drive high performance results leading to excellence.



Figure 2.2: A typical Career Development Plan.

Source: (Iyortyer, 2014).

Career development and Opportunities can be gotten from Formal Training programs, on the job learning, Professional associations, Team projects and Regular performance reviews and feedbacks. According to Russell (1991), organizational interventions that are used in career development programs are defined as “any efforts by organizations to assist individuals in managing their careers and to help organizations meet their goals”. These efforts may consist of strategies, policies or programs ranging from informal and unstructured to highly formal and structured. Russell (1991) further illustrated that the interventions enclosed in the programs should address the internal or the external career and are designed to meet human resource needs that may influence the career development of employees. Larwood and Gutek

(1987) also concluded that any theory of women's career development must take account of five factors:

1. Career preparation, or how women are brought up to view the idea of a career and whether they believe they will have one or not.
2. Availability of opportunities should be taken into consideration, and whether they are limited for women, compared with men.
3. Marriage, viewed as neutral for men but harmful to the career of women.
4. Similarly, pregnancy and having children inevitably cause women to take some kind of career break.
5. Timing and age, as career breaks and family relocations often mean that women's careers do not follow the same chronological patterns as those of men.

Kappia et al. (2005) identified impediments relating to career development as apathy, external funding issue, and commitment to work role, institutional issues, access, external commitments and accessibility.

2.9 Feminist/Gender theories

Feminist or gender theories are primarily concerned with non labour market variables. The basic premise of these theories is that women's position in the labour market arises as a result of Women's subordinate position in a traditional, patriarchal society (Dainty and Lingard, 2006). Gender is fundamental to the culture of organizations (Dainty et al., 2000). Organizations form 'gender cultures' known to be hierarchical, patriarchal, sex-segregated, sexually divided, sex-stereotyped, sex discriminatory, sexualized, sexist, misogynist, resistant to change, and gendered power structures (Newman and Itzin, 1995).

In most societies, domestic work, child, and dependent care are perceived to be women's responsibility, while men fulfil the role of provider or 'breadwinner' (Badgett and Folbre, 1999). Despite women's increased commitment to paid work, empirical research reveals that the primary responsibility for domestic duties in most households is still borne by women (Roxburgh, 2002). Feminist theorists suggest that this division of responsibilities explains why women accumulate less human capital because they tend to have truncated careers due to early or temporary withdrawal from the labour market (Dainty and Lingard, 2006).

Theories of patriarchy

The key explanation offered by the patriarchy theories for women's subordination is that segregation by occupation is used to restrict women to the 'ghetto' of low paid work, restricting competition by raising/building glass walls and resulting in women invariably earning less than men (Gurjao, 2006).

Steven Goldberg's theory of the inevitability of male dominance and patriarchy based on psycho physiological processes argues that testosterone and other differences in male psychological development makes men generally more aggressive, self assertive, dominant and competitive and are a source of sex differences in motivation, ambition and behaviour. Consequently, they invariably seek to obtain the top position in any hierarchy, be it workforce, sport, politics, crime or any other area of social activity with a hierarchy of status and power that prompts competitive behaviour. He also states that men may not be necessarily able, competent or effective in using positions of power and authority, only that they are motivated to seek such positions with greater determination and persistence than women, and are more prepared to make sacrifices to get there, in terms of forgoing other activities or benefits (Hakim, 1996).

Hartmann's theory of patriarchy, male organisation and job segregation defines patriarchy as men's domination of women; specifically men's control of women's labour with explicit emphasis on occupational segregation as the key mechanism used by men to restrict and constrain women's access to income and earnings, forcing domestic division of labour with a disproportionate share of housework and childcare responsibility thus excluding them from paid work; rendering them dependent on men. This may be simply stated as male organisation to further their interests against those of women, especially to control women's work wage which remains the basis for most formulations today (Hakim, 1996).

Becker's theory of rational choices within families argues that the sexual division of labour results in men investing more in their human capital: education, training, career development and work experience. Women tend to prioritise family and choose jobs that are less demanding and compatible with domestic responsibility. This results in occupational segregation as women tend to seek jobs that are less demanding or require less responsibility (Hakim, 1996).

Theories of occupational segregation

Theories that attempt to account for the establishment and maintenance of segregation include those based on individual differences, including human capital theory; those that are based on ideas of discrimination by employers, including labour market discrimination and rational bias theories; and those that take as their central premise, the notion of systemic barriers within organisations, including intergroup and dual labour theories. While no one theory accounts single-handedly for the establishment and continuance of gender segregation, together they help to make sense of these employment phenomena. There has been relatively little empirical research to test these theories at organisational level.

There are, therefore, a number of influences which affect occupational segregation, the research shows that these are mutually reinforcing. Decisions made by individuals certainly contribute to the perpetuation of occupational segregation, but perceived occupational segregation in turn influences individuals' choices (Miller, Neather, Pollard and Hill, 2004a).

The various theories put forward to account for continued gender segregation, restricted career advancement and lower wages for women at work may be grouped into three different categories:

É Those that focus on individual, objective differences between the sexes that account for women's relative lack of success compared with men.

É Explanations based on discrimination by employers.

É Explanations based on the existence of systemic barriers and structural discrimination.

Individual differences theories suggest that objective differences between the sexes; factors such as women's attitudes, traits and behaviours prevent them from succeeding at the same rate as men. They also propose that women and men do different jobs because women and men themselves are different. However, studies that have examined characteristics which are relevant to work have in fact found few gender differences.

Human capital theory stress women's lower level of human capital in terms of what they bring to the labour market. Human capital theorists assume that women's main priority is to raise a family, and that they therefore choose to limit their participation in the labour force (Dainty and Lingard, 2006). There is a more specific version of the individual difference theory that contends that people are rewarded for their previous investment in their own education and training. With qualifications and experience held constant, as in the case of the

nursing profession, there remains an advantage for men relative to women that cannot be accounted for by differences in human capital. Therefore human capital theory clearly does not fully account for the differences in present-day patterns of employment of women and men. Women tend to prioritise family or domestic work, choosing to limit labour participation resulting in lowering their skills, qualification and experience and thus lowering their human capital value (Dainty and Lingard, 2006).

Discrimination by employers

This group of theories is based on the principle that occupational segregation derives from the beliefs held by employers that differences exist between the sexes that make one sex less suitable for employment (Gurjao, 2006).

2.10 Occupational Segregation

An occupational stereotype is a form of sex-role stereotyping, that is, a set of assumptions about the sorts of activities and interests that are associated with the roles of men and women in society (Gurjao, 2006). A number of theories have been put forth over the years to explain such widespread gender segregation of occupations. Segregation takes place first and is then embodied within stereotypes and cultural norms and expectations, which then serves to underpin the process of segregation. Individuals by and large perceive an occupation as being performed principally by men or by women, and then believe it must require masculine or feminine attributes in order for an individual to be effective within that role. Two different forms of occupational segregation by sex are observed. Horizontal segregation refers to the distribution of men and women across occupations, for example women may be perceived to work as maids, caretakers, nurses and secretaries and men as truck drivers and doctors. Vertical segregation refers to the distribution of men and women in the same occupation but

with one sex more likely to be at a higher grade or level, for example men are perceived as more likely to be production supervisors and women production workers, and men are more likely to be senior managers and women junior managers (CIOB, 2006).

2.11 Glass Ceiling

The "glass ceiling" syndrome was coined by Wall Street Journal some years ago to mean an organizational invisible, implicit but impenetrable barriers that prevent women from achieving parity with their male counterparts at the highest levels of the corporate ladder (Maxwell, 2007). "The glass ceiling" as described by the Glass Ceiling Commission in the USA as: "...invisible, artificial barriers that prevent qualified individuals from advancing within their organisation and reaching their full potential". The term originally described the point beyond which women managers and executives, particularly white women, were not promoted (Gurjao, 2006). The "glass ceiling" refers to an invisible barrier which women face as they attempt to achieve promotion to the higher levels of organizations or seeking employment to some industries. According to Microsoft Encarta World Encyclopaedia, the term glass ceiling is a "barrier to career advancement: an unofficial but real impediment to somebody's advancement into upper-level management positions because of dissemination based on the person's gender, age, race, ethnicity, or sexual preference" (Kolade and Kehinde, 2012). Morgan (1998) describes it as cases in which women begin their careers on an equal footing with men, and either lose ground gradually over time, or continue to progress at par with their male counterpart until, at some point, their progress is blocked.

Kolade and Kehinde (2012) noted that the Federal Government of Nigeria, in its Third National Development Plan advocated for (35%) of women participation in strategic / managerial positions in both traditional and non-traditional careers. This according to them

has increased women representation in management/policy making of the country. Also in comparison to men, women are often left behind when it comes to advancement despite having the same educational background and work experiences. It was noted that the glass ceiling syndrome still exists regard less of several researches conducted within the industries ranging from manufacturing to high tech consumer goods highlighting the fact that women often outpace their male colleagues on many traits of leadership and management abilities (Barbara, 2005). The findings of California-based Hagsberg Consulting Group study conducted in 2000 reveal that women executives outpace their male counterparts on forty two of fifty two essential management skills.

Specifically, female executives, when rated by their peers, bosses, and subordinates, score higher than their male colleagues on such measures as producing high-quality work, setting goals, and mentoring. Women are also applauded for being more collaborative, better motivators, and more willing to share information with others than many men are (Sharpe, 2000). Despite these achievements, women still strive to emerge and grow out of male oppression and move to higher levels (Kolade and Kehinde, 2012).

2.12 Career Knowledge and Legal rights

Unlike men, recent female entrants to the industry were unlikely to have been advised to join the industry by friends and family, or to have been advised by same-sex role models with experience of working in construction. Rather, they tend to have been the subject of targeted recruitment campaigns or had read literature specifically aimed at attracting them to the industry. Consequently, they had a poor initial understanding of the culture of the industry, and the inherent difficulties of working in such a male dominated environment (Dainty et al., 1999). The CITB (2003) found that parents, teachers and school children believe that the jobs in construction industry were limited to bricklaying, joinery, and painting and decorating. It is

also found that teachers, parents, career advisors and school students have only a vague, superficial knowledge of the industry. Careers teachers and careers advisors were perceived by school students, undergraduates and graduates to provide inaccurate and inadequate information on the construction industry.

Owing to the variety of courses and diversity of career paths even professional career advisers find the subject of careers advice for construction confusing (Gale, 1994a). Furthermore, construction higher education, which for most formed the interface between career choice and working in the industry, was found to have provided a sheltered environment, and to have presented a sanitised view of the realities of working life in the sector. These factors resulted in younger women becoming disillusioned with the reality of career opportunities, and in many seeking alternative positions outside of the industry as a result (Dainty et al., 1999).

Although a greater awareness has been found among A-level students and undergraduates, with regard to professional activities such as engineering and architecture, the status of the industry as a career opportunity does not compare favourably with other options (Harris, 1989). This is mainly because the girls' career choices, and in particular their encouragement to enter non-traditional occupations is strongly influenced by their family, friends and teachers (Agapiou, 2002).

The decision of selecting a career in the construction industry should be taken well in advance at schools level particularly by those who intend to be a construction professional in the future. The more the schools' students of both sexes know about the construction industry the more likely that both sexes are to select a career in the construction industry. Knowledge of the nature of construction industry professional occupations, higher education routes to professional status and career opportunities in construction were seen as extremely important

by school students considering a degree in construction. Therefore careers about an industry must be transmitted to school students (Gale, 1994a).

Likewise, with regards to knowledge on their rights, many women in the Nigerian construction industry are not aware of their legal rights. The International Labour Organisation (ILO) has formulated the following basic rights for women in any industry, namely:

- The Right to Equal Treatment
- The Right to Equal Training and Career Opportunities
- The Right to Maternity Protection
- The Right to Combine Work and Domestic Responsibilities
- The Right to Paid Work
- The Right to Safe & Healthy Work Environment free from sexual harassment.

Chapter IV of the Constitution of the Federal Republic of Nigeria 1999 under Articles 33, 34, 35, 42, 45 covers the rights of women, but the cultural issues of the male dominated industry make it difficult for the implementation of these laws.

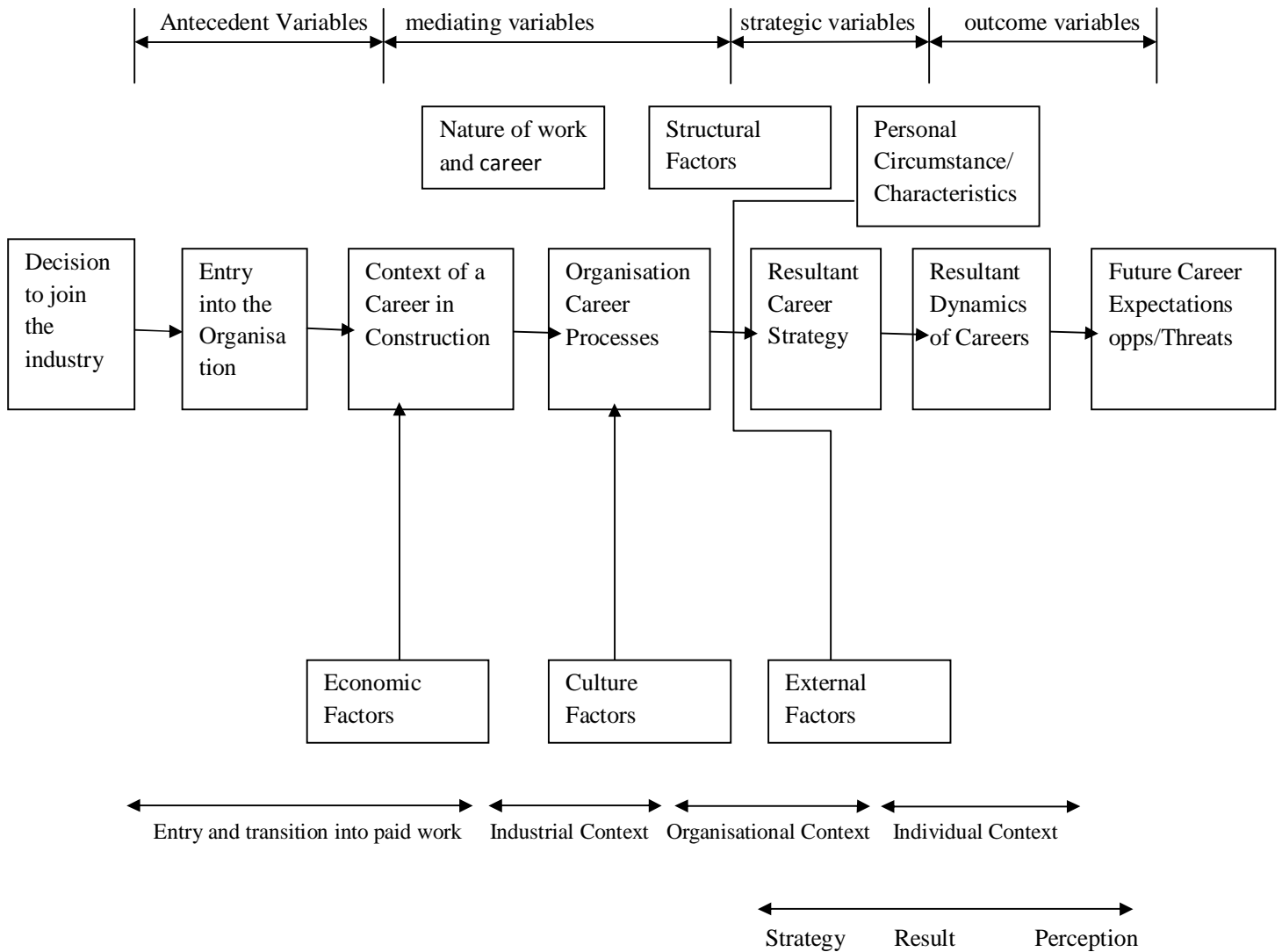
2.13 Career determinants of women within the Construction Industry

Careers can be seen to be determined by the mutually interdependent dimensions of structure, culture and individual action within an organisation (Dainty et al., 1999). Organisations form a cultural system that simultaneously promotes competition and co-operation. Within organizations, two structural aspects set the framework within which employees can develop their careers: the organisation's structure and the organisational processes which define work patterns (Evetts, 1996). Organisational structures provide motivation for employees in pursuing occupational goals in terms of their psychological fulfilment (Dainty et al., 1999).

The frameworks which link posts and positions within an organisational hierarchy are known as career structures, which are defined by salary and promotion ladders.

Dainty et al. (1999) in their research came out with eight (8) generic data (model) which was used to conceptualise the explanations of the under-achievement of women in relation to their career determinants. Although this model presents an over-ordered conceptualisation of the emerging career influencing factors, its use allowed a logical categorisation of the determinants of women's careers.

VARIABLE TYPE



Context of issue coded into framework.

Fig 2.3 Analytical framework for investigation of careers in construction

Source: Dainty et al. (1999)

If the theory developed as part of this study is reflected across the sector, attempts to attract more women ought to be moderated until the structure and culture of its organizations have been developed to become more accepting of their employment. Initiatives aimed at such a change must be capable of manipulating the culture of the construction work environment, as well as removing structural constraints on women's careers.

2.14 Mentoring in the Construction Industry

Mentoring is a long-term relationship between two people, the mentor and the mentee. The objective of the relationship is for the mentor to share her knowledge and experience with the mentee and be willing to offer guidance and encouragement as well as helping the mentee to reappraise his progress as the relationship progresses. Mentoring involves partnership between the mentor and mentee working in a similar field or sharing similar experiences. It is a helpful relationship based upon mutual trust and respect. It is an effective way of helping people to progress in their careers (Iyortyer, 2014).

A mentor is a guide who can help the mentee to find the right direction and who can help him/her to develop solutions to career issues. Mentors rely upon having had similar experiences to gain an empathy with the mentee and an understanding of their issues. A mentor may be an employee of the company or may be a professional from outside of the company. In a male dominated profession like the construction industry, mentoring is a very crucial tool for the female professionals. The Mentor is able to provide guidance to a less experienced employee and help the mentee to believe in herself and boost her confidence (Iyortyer, 2014).

Qualities of a Mentor

- Personal commitment to be involved with another person for an extended time.
- Respect for individuals and for their abilities and their right to make their own choices in life.
- Ability to listen and to accept different points of view.
- Ability to empathize with another person's challenges.
- Ability to see solutions and opportunities as well as barriers.
- Flexibility and openness.

Mentoring is a very essential part of the development of any country's construction industry. The Construction Industry Council (CIC) in the UK came up with the FLUID, Diversity Mentoring Programme. It is an innovative scheme developed by RIBA's Architects and the Construction Industry Council (CIC) to recruit talented practitioners from different backgrounds for management and leadership roles in the built environment. The programme was targeted at mentees who are at a key stage in their career development e.g. Student transiting to practitioner level, newly qualified practitioners transiting to junior managers, junior management transiting to senior practitioners/associate and beyond and sole practitioners who are hoping to expand their businesses.

A new type of mentoring relationship that exists in the construction industry is speed Mentoring. It is an organized event where experts from the construction industry have 10-15 minutes with mentees. The mentees have the opportunity to discuss a challenge, issue or ask advice about their career. The concept has had great success notably at women networking events in the UK. The Women of the World events have grown due to their popularity, with 90 women being mentored in the first year and 300 in the second. The women of the world are a free event that is held in the UK to encourage more women into the construction industry. It was held for the first time in 2013. The event was formed to encourage budding architects, engineers, quantity surveyors and project managers and others working in the construction Industry. The event was not just for women, it was aimed at people who wished to network with likeminded people and attend an event that encourages more women to join, stay and progress within the construction industry.

Some organizations that offer women mentoring programs in Nigeria are

1. WIMBIZ Mentoring Programme ó has been structured to meet the needs of growing women in management, business and government seeking development and growth in every aspect of their lives. They organize quarterly dinners for mentors and mentee with the intention to

build generational bridges, and serve as an avenue to the mentors to give back to the society by teaching up coming generations the ropes in their respective fields of endeavors.

(www.wimbiz.org)

2. Women Mentoring Women Partnership Programme. This is a citizen based mentoring partnership programme that benefits and matches young women across Nigeria with inspirational mentors who can guide them to build better self-esteem, start or grow business, nurture relationships and make positive life choices(www.ideabuilders.org).
3. Access Bank Women Community: is a program that is meant to inspire, inspire and empower women by providing tools to build their business and support their families and create better future for their children. They provide with information, network opportunities and privileges that enhance their life style (www.thewcommunity.com).

2.15 Innovation in the Construction Industry

Innovation means new idea, device, parcel, and application of better solution that meets new requirements, in articulated needs or existing market needs (Wikipedia). Innovation is crucial to a continuing success of any organization. It is synonymous to change, alteration, transformation, metamorphosis, it is renovation, reorganization, rearrangement, recasting, remodeling, and recycling etc. (The six (6) RøS). Innovation is untouchable but can be felt when it occurs. The definition of innovation includes new technology, services and solutions, experiences, processes, methods and valuable outcomes. The characteristics of successful innovation include Discipline, Integrity and regular management of critical sector (Time /Money). Innovation is achieved through formal research and development (breakthrough innovation), less formal on the job modifications of practice (through exchange, personal experience) (L- Puddicombe, 2014). Innovation can catalyse change and help dramatically to

shift persistent inequalities between women and men. It can also arm women with the ability to recognise new opportunities and the confederacy to dive into it.

USAID is changing the traditional attitudes about women owning productive assets. It is also supporting and utilizing innovation means to empower women's leadership in science. USAID is committed to fostering innovative development solutions that have a broad impact on the people. These include; science, technology and innovation to increase men and women's health and well-being. Health is wealth, we must be well enough to achieve and display our empowerment through innovation, (USAID, 2012). Technology also holds great potentials for reducing gender gaps and empowering women and girls. This has the power to improve women's health, increase economic productivity and reduce unpaid labour. Using science and technology to help change social norms and stereotypes can help reduce gender disparities.

L- Puddicombe (2014) noted that Innovation is like milk that has a shelf life and goes sour after sometime. This could also be likened to women that have the flowery age at a point in life and withers away in strengths and zeal after a while. The author concluded that Women should take advantage of their flowery age through innovations so that they could be empowered for life without going obsolete. Creative ideas most times intersect with women's economic, social and personal development including women in industry. Innovative pursuit can produce fundamentally deeper benefits to all.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Approach

Research methods and styles are not usually mutually exclusive although only one or a small number of approaches will normally be adopted due to resource constraints on the work. The different approaches focus on collection of data rather than examination of theory and literature. According to Yin (2003), the selection of a suitable research approach should be governed by the basis of-

- The nature of the enquiry and the type of questions being posed;
- The extent of the investigator's control over the actual behavioural events; and
- The degree of focus on contemporary events.

There are three types of research methodology; quantitative, qualitative and a combination of both methods called triangulation or mixed method (Fellows and Liu, 1999)

3.1.1 Quantitative Research

Quantitative approaches tend to relate to positivism and seek to gather factual data and to study relationships between facts and how such facts and relationships accord with theories and the findings of any research executed previously (literature) (Fellows and Liu, 1999). The samples collected from quantitative research are often large and representative with scientific techniques used to obtain measurements ó quantified data. Analysis of the data yield quantified results and conclusions derived from evaluation of the results in the light of the theory and literature can be generalised to the larger population within acceptable error limits.

3.1.2 Qualitative Research

Qualitative approaches seek to gain insights and to understand people's perceptions of the world, whether as individuals or groups. In qualitative research, the beliefs, understandings, opinions, views etc. of people are investigated. The data gathered may be unstructured, at least in their raw form, but will tend to be detailed, and hence rich in content and scope. The following characteristics of the qualitative methodology as outlined by Dainty (2004) are as follows

- Inductive (concepts are developed from data);
- Subjects and settings are viewed holistically;
- Researchers are aware of their effect on the people that they study;
- Gains an understanding from the informant's perspective;
- Methods are humanistic - they look beyond the specific aspect being examined;
- The data collected is rich, and difficult to analyse;
- It demands that the researcher gets close to the data and to the phenomena which are being examined; and
- It emphasises validity.

3.1.3 Research Approach adopted for this research

The Qualitative research approach was adopted for this work with emphasis on the use of the interview technique. This is considered as one of the most important sources of gathering information in achieving the aim and objectives of this research work. The interview can either be formal or informal but emphasis in practice is not between the completely formal and the completely informal approach, but between many possible degrees of informality.

In this study, biographical and focus groups interviews with open ended questions was employed. This according to Lu et al. (2008) is consistent with the aim to understand more about women's lived experience of their careers. This specific 'lived-in-experience' refers to the way and manner the women have earned their living, conform to the harsh realities of the construction industry and also establishing a career within it.

In qualitative research, the researcher is concerned with the trustworthiness of data and may rely on triangulation methods such as peer debriefing and interviewer corroboration to make sure it is accurate. Qualitative research is only meant to give people insight into what happened with the small sample of study subjects so they can study the conclusions and see how relevant the research study is to them.

3.1.4 Interview Design and Content

An interview is described as any form of meeting in which someone is asked questions either by a prospective employer, a journalist or a researcher. It is an interaction in which two or more people are brought together into direct contact for at least one party to learn something from the other. In conducting an interview for research purposes, care must be taken in recognising the strengths and weaknesses associated with using interviews as a means of data collection. Prominent among the basic advantages of this method is the opportunity it affords the researcher to immediately clarify misunderstandings of the respondents in terms of the interpretation of the questions asked, while also giving the respondent the advantage of exploring to his/her heart content the response to each questions posed without restrictions. The disadvantages of this method are the likely bias and strong influence on the part of the interviewer, including possible misinterpretation of the questions by the respondent with a perception that is quite different from that of the interviewer /objectives of the interview (Fellows and Liu, 1997).

The interviews were conducted with professional women in construction practice (See Appendix for professional women's interview guide). The semi-structured interviews were conducted face to face in a private setting that is devoid of interruptions, while telephone interviews were also conducted on respondents that were outside the reach of the researcher and were willing and comfortable to talk through the phone. The advantages of using face to face interviews are that they enable the interviewer to follow up and probe responses, motives and feelings while the main drawback is that they tend to be more costly and time consuming than telephone or video-conference interviews. The researcher ensured that the questions were direct, specific and simple while avoiding double-barreled questions, leading or emotive questions, or questions which were too complex or ambiguous. Detailed planning of the questioning was undertaken to ensure that it covered all areas of the objectives, did not collect irrelevant information; was clear, unambiguous and unbiased. The interview of each respondent lasted between twenty minutes to forty five minutes. A combination of audio taping and written record was used during each interview. This is to ensure all comments were captured, particular issues are noted and to ensure the interviews covered the subject area in sufficient detail. All data was then transcribed to aid clarity and consistency for later analysis. The coding of the transcribed data took care to ensure the results were easy to use and understand and at an appropriate level of detail.

3.2. Sample selection

The key actors within the building industry were concentrated upon as the survey population for this study based on their level of interaction within the built environment. The key participants are Architectural, Quantity Surveying, Building and Civil Engineering practices. The study specifically targeted registered female members within the professions with a survey population of about 697 as at the time of this study. The women wing of the

aforementioned key areas was contacted for proper guidance towards the list and contacts of the potential participants. The inclusion criteria is all registered female professionals in the chosen fields of the industry with minimum of five years working experience who are available and willing to participate. The exclusion criteria was those who have not been fully engaged in the profession even though they have the requisite years of practice, those not available such as those who might be on leave and those who might decide not to participate. The sampling frame of women interviewed for this work were drawn from women practicing in Lagos, Abuja and Kaduna while purposive sampling of forty-five (45) who met the inclusive criteria for this work were selected as the sample size from the chosen locations for study.

3.3 Research Method adopted in the study

One ó to- one interview with professional women within the construction industry was undertaken. The interviews were structured around key questions based on the criteria of demographic profile (age, religion, marital status, number of children, professional status), the career choice, specific career experience in relation to the barriers faced and ways by which they were overcome, career stages and notable career satisfying moments etc (See Appendix for professional women's interview guide) in such a way as to create sufficient flexibility to enable the interviewee flow along with the questions to prompt a positive response.

Personal interviews are useful for collecting in-depth information, this is very necessary in order to dig deep into the personal feelings of the interviewees in achieving the objectives of this research work. Questions during the interview can be explained and the information can also be supplemented. There was a clear focus on what should be investigated, as derived

from the research objectives. Therefore specific issues needed to be addressed and a semi-structured approach allowed for them to be covered in a logical fashion within the course of the interview.

Secondly the interviewees needed to be allowed a certain amount of freedom to discuss certain areas and to elaborate on factors and discuss what they felt was most important. The female practitioners were interviewed because it was felt that they could better articulate the impact of barriers to professional practice as well as the benefits derived from active practice as a woman within the construction industry. The interviews adopted an attitudinal research approach which is used to subjectively evaluate the opinion of a person or a group of people towards a particular attribute, variable, factor or a question.

3.4 Data Collection

Qualitative data, with its emphasis on peoples' lived experience', are fundamentally well suited for locating the meanings people place on the events, processes and structure of their lives: their 'perceptions, assumptions, prejudgements and presuppositions' (Amaratunga. et al., 2002).

Data were obtained through voice recording using audiotapes and extensive notes and documentation were taken in the course of the interview to make data available for analysis. Coding of data was also carried out to assist in the analysis so as to reduce some of the large amounts of information that were recorded.

3.5. Data Analysis

Qualitative research describes the collection of data from a sample group of experts or average people. The purpose of qualitative research is to reach some sort of consensus of

opinion. Once data is gathered, an analysis must be made and there are several approaches to sorting out data that is collected through qualitative research.

For qualitative data to be analysed properly, it must be prepared and organized in such a way that it can be read. Data can be collected through-:

-Coded Analysis- coded analysis involves taking data groups and organizing the results into groups. Each of these groups is then given a "code" that reflects what makes these results similar. From there, a researcher can begin to understand why there may be more consensus in one code versus another. Coded analysis was developed by Seidel in 1998. He assigned three steps to the process. The first was collecting, or gathering data, the second was noticing or dividing them into different codes and the last was thinking, or analyzing the data based on these codes.

-Thematic Analysis- this is similar to coded analysis, but results are grouped by theme. Thematic analysis is useful because themes are produced by the results of the research and are not invented by the researcher, leading to less bias. A theme can be as simple as a certain opinion of a particular product. Group the results naturally and organically when organizing themes.

-Discourse Analysis- discourse analysis does not focus on the result or answers to questions that were gathered, but rather patterns in speech and the written words. It is not necessarily important that complete notes be taken during the course of data collection if you are using this type of data analysis. It is useful to employ several researchers to take notes so that everything is recorded.

3.5.1 Interview Data Analysis

Data from interviews are textual and can be difficult to analyse but the richness of the data in qualitative research means that substantial results can be obtained if the data is treated

properly. The analysis for the qualitative data in this study involved the use of content analysis as elaborated in Wilkinson and Birmingham (2003). Content analysis applies significance or meaning to information and helps to identify patterns in the text (transcript of research interviews). The principle of content analysis requires first that the data are coded or grouped into categories which will need to be checked to be sure that they accurately represent what is being said. These codes include words, themes, phrases or whole sentences which together form a sort of checklist (Walliman, 2001). After the coding has been completed, the data is then analysed and results generated. The two methods used are either conceptual analysis or relational analysis. Conceptual content analysis was adopted and this approach takes into account the appearance of a concept or the numbers of times (frequency) a particular concept appears in a text. Also referred to as thematic analysis, the themes for conceptual analysis are sometimes implicit as well as explicit. The stages in the conceptual content analysis given by Walliman (2001) include:

- i. Decide on the unit/level of analysis: The choice is made of whether to use single words, phrases or whole sentences.*
- ii. Identify the concepts: these are the issues, themes or concerns to be gleaned from the data and decision will have to be made whether to have a rigid set of concepts or flexible lists that can be added unto later on as the work progresses.*
- iii. Define the concepts: Some words may have similar shades of meaning and these needs to be clearly defined to avoid ambiguity. Words with similar meanings could be coded together.*
- iv. Decide whether to code for incidence or frequency of concepts: The decision to code for the appearance of a word or the numbers of times it appears need to be taken. Incidence of a word may give a limited perspective than frequency which may be an indication of the relative importance of a concept.*

v. *Establish coding rules: At this stage the codes that have been clearly defined could be grouped or further categorised together and the rules will help to ensure that words are not wrongly placed in the various themes.*

vi. *Trawl through the information: A thorough examination of the text allows the researcher to identify and deal with words which may not 'fit' into the established codes. Decision is then made to either expand the codes (note 2 above) or discard the words.*

vii. *Code the information: This is the actual coding of the textual data which could be done manually or using available computer software packages.*

viii. *Analyse the results: This final stage involves the presentation of the incidences and/or frequencies of words with a view to determining the meanings, associations and relationships to be derived from them.*

Bordens and Abbott (2008) note that while content analysis can be a useful technique to help in understanding behaviour, it is purely descriptive and cannot establish causal relationships among variables. Also the validity of the results will depend on the textual material to be analysed and so a thorough interview, for example is necessary to ensure that all issues are adequately captured.

CHAPTER 4: DATA PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS

The sample size of forty- five (45) respondents were interviewed for this research work and were drawn from the key participants in the building industry based on their level of interaction within the built environment. The key participants are Architectural, Quantity Surveying, Building and Civil Engineering female professionals.

4.1. ANALYSIS OF RESULTS

The data collected was analysed using thematic analysis method i.e. grouping the results and organising them according to their opinions on issues discussed.

4.1.1 THE RESULT

Table 4.2.1 Respondents' Age

s/n	Ages	Frequency	Percentage
1	35 - 40	9	20%
2	41 ó 45	15	33%
3	46 ó 50	14	31%
4	Above 50	7	16%
	Total	45	100.%

Source: Field Survey (2015)

As shown on the above Table 4.2, the minimum age of the Respondents interviewed is 35years and as indicated, the Respondents between 35 ó 40 years is 20%, 41 - 45years is 33%, 46 ó 50 years is also 31% while those above 50 years is 16%.

Table 4.2.2: Respondent's Marital Status

s/n	Marital Status	Frequency	Percentage
1	Married	40	89%
2	Not Married	5	11%
	Total	45	100.0%

Source: Field Survey (2015)

The married women in this survey are 89% while the unmarried ones are 11%.

Table 4.2.3: Respondent's Number of Children

s/n	Number of Children	Frequency	Percentage
1	1 - 2	15	33%
2	3 - 4	19	42%
3	5 and Above	7	16%
4	None	4	9%
	Total	45	100.0%

Source: Field Survey (2015)

The women that have one or two children are 33% while those with three to four kids are 42%. Those with children above five in number are 16% while those without any children at all are 9%.

Table 4.2.4: Respondents Religion

s/n	Marital Status	Frequency	Percentage
1	Christian	25	56%
2	Muslim	20	44%
	Total	45	100.0%

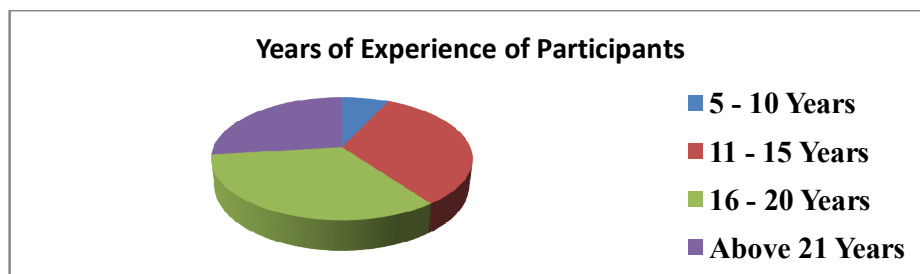
Source: Field Survey (2015)

Table 4.2.5: Professions of the Respondents

s/n	Professionals	Frequency	Percentage
1	Architects	12	27%
2	Quantity surveyors	20	44%
3	Builders	4	9%
4	Engineers	9	20%
	Total	45	100.0%

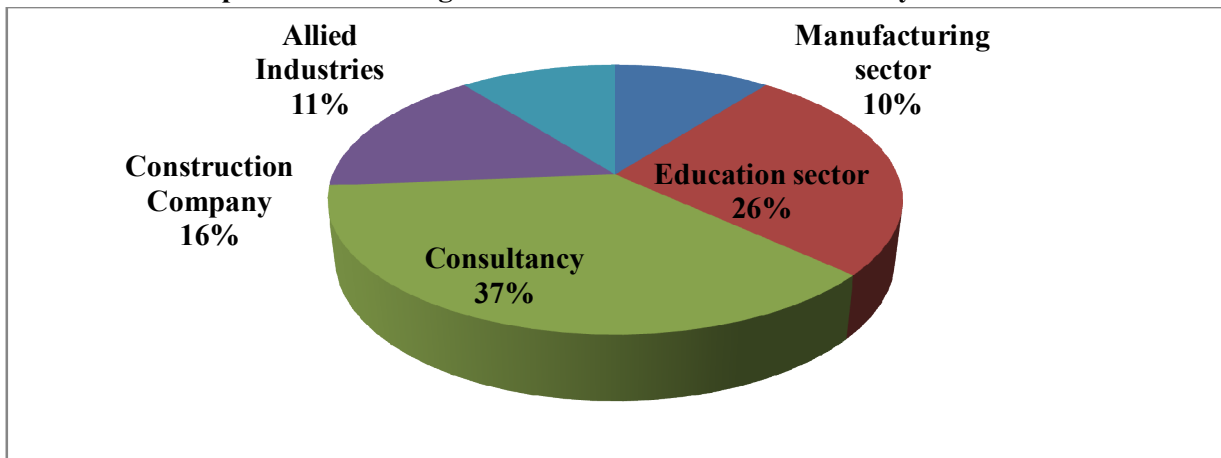
All the respondents are registered professionals with their various institutes.

Figure 4.2.6: Years of experience of participants in the industry



As shown on the Table 4.2.6, the benchmark of working experience for the Respondents to be interviewed is 5 years. As indicated, the Respondents between 5 to 10 years is 9%, 11 - 15 years is 26%, 16 to 20 years is also 29% while those above 20 years is 36%.

Table 4.2.7: Respondents working sectors in the construction industry



The respondents interviewed were chosen from the various sectors of the construction industry to obtain a wide coverage area of working experience of the women.

Table 4.2.8: Respondent's reasons for choosing a career within the industry

s/n	Reasons	Frequency	Percentage
1	Parental influence	9	20%
2	Working parents within the industry	10	22%
3	Chance entry	4	8%
4	Prior knowledge of the industry	7	16%
5	Natural talent for creativity	7	16%
6	Wanting to do something different	8	18%
	Total	45	100%

Table4.3: Career experiences and expectations of participants within the construction industry.

s/n	Professionals	Frequency	Percentage
1	Good experience	23	53%
2	Bad experience	3	6%
3	No career expectations	9	20%
4	Psychologically prepared	10	21%
	Total	45	100.0%

4.4: Support from male counterparts within the construction industry

In terms of the support obtained from their male counterpart, 94% of the respondents mentioned that they were fortunate to have worked with understanding men whom have encouraged them greatly in their career while 6% didn't get any support at all.

4.5: Challenges

In terms of challenges faced along their career path, all the respondents are in accord with regards to following:

- a. Acceptance as a professional
- b. Competition with men
- c. Self owned practice
- d. Under utilization
- e. Religious norms
- f. Financial hardship

g. Marriage

4.6: Ways of overcoming the challenges

The women interviewed have overcome the challenges through the following means

- a. Strong determination
- b. The ability to deliver timely within cost limit
- c. Being self willed and confident in their abilities
- d. Being able to voice their opinion in a room full of men
- e. Doing the job the proper way and not because they are the weaker sex is always the key.
- f. Support from senior female colleagues was also instrumental towards meeting their challenges.

4.7: Notable Career Experiences

The notable career experiences of the respondents are as follows

- a. Academic qualifications
- b. Recognition
- c. Giving instructions
- d. Accomplishment of projects
- e. Mentoring
- f. Conducting site meetings

4.8: Regrets

All the respondents are in accord with a basic regret, which is they actually thought they would make a lot of money, but the reverse was the case. The love they all had for the

industry was their mainstay which enabled them to look beyond the money aspect and sought for professionalism. The initial thought was to leave for a better and more lucrative profession at the start of their career, but the interest and love of the industry got them going and the thought that they may actually not be able to fit in into another was also there. 25% of the respondents also thought that they could have made much more money if they had been properly guided from school to diversify within the industry i.e. choosing a pathway that has not been fully exhausted and making something tangible out of it.

The other regret for some was not being able to advance academically. They were so engrossed in practice that they were not able to acquire post graduate qualifications. Although they are members of their professional bodies but they felt this is not enough. None the less, they are all happy with being in the industry, and 75% admitted that it's like they were actually born to do what they are doing. They are fulfilled with their careers even with little or no social life at all especially if one is in it as a career and you want to excel.

4.9: The industry being equipped to accommodate women

All the respondents are of the opinion that the industry has come a long way to recognise women and accommodate them. The establishment of various women wings within the professions is a living proof. The Quantity Surveyors have Women Association of Quantity Surveyors of Nigeria (WAQSN), the Engineers women wing is tagged The Association of Professional Women Engineers of Nigeria (APWEN), the Architects have Female Architects of Nigeria (FAN), and the builders also have Association of Women Builders of Nigeria (APWBN).

These associations have been established to raise awareness that women can go into the industry and succeed. They showcase successful women as role models and mentors to

upcoming ones; they give career talks in both secondary and tertiary institutions and also encourage networking among the women in practice.

4.10: DISCUSSION OF RESULT

Demographic profile

The women interviewed have had adequate working experience and opportunities to practice their various fields cutting across the major sectors of the industry.

Based on the age of the respondents, these women have transited from education to work and have strived towards the achievement of personal goals. They have adjusted and will continue to adjust to the world of work and have made a more tangible contribution to their organization. These women are at an age when family responsibilities are most likely to impact heavily on their careers (O'Neil and Bilimoria, 2005).

The marital status of the women as shown on Table 4.2.2 indicates that the barriers encountered within the industry did not prevent majority of the women from getting married. They are of the opinion that women are more respected in this part of the world when they are married. This according to them prevents unwarranted attraction and wards off unsolicited attention from their male colleagues especially in active practice.

The respondent's number of children shown on Table 4.2.3 is an indication that the tedious nature of the industry has not deterred the women from having and raising children. Judging from their responses, they seem to have enjoyed being mothers especially being that those with children between three and four have the highest percentage and those that have decided not to have kids are living with their decisions without any regrets.

From the Table 4.2.4, religion seems not to have deterred the women from practicing. In this part of the world especially the North where majority of the Muslim participants reside,

women are still kept in Purdah. These women have looked beyond religion to come out and practice their profession.

All the respondents interviewed are registered members of their various professions and the five years minimum working experience is so pegged is to ensure that the respondents must have had enough experience within their various fields of endeavor, developed career orientation and sought opportunities to practice the chosen occupation/profession. These criteria serve as a strong basis for drawing conclusions on the issues discussed in relation to their career development.

Reasons for entering into the profession

Majority of the respondents found themselves in the industry with little or no knowledge of what it takes to undertake a career within it. Considering their age and the number of years spent in active practice, the campaign towards the recruitment and retention of women were minimal at their point of entry.

The respondents had various reasons for choosing a career within the construction industry. 20% of them came into the industry because their parents wanted them to study a course within it, and in order to satisfy them, they willingly entered the industry without knowing what to expect and the real nature of the industry itself. Out of this, 12% had parents whom are actually working in the industry and such wanted their daughters to study a course within it, while the remaining 8% had no relations at all who had actually studied a course within the industry. 8% of the respondent couldn't just explain how they got into the industry and why. 16% had prior knowledge of the industry basically from their secondary school days while another 16% also fell in love with their profession because of their personal talent for creativity and the love for development of their environment. The last 18% just wanted to do

something different from what others have been doing and they felt the construction industry will afford them the opportunity to be different from others.

Parental influence especially those working within the industry ranked higher among the reasons given by the respondents. This correlates with the study of Sullivan (2002) where women's decision for non-traditional college degrees was influenced by both internal and external factors. The internal factors include personal interest (pursuit of jobs that offered financial stability and intrinsic rewards); background (early non-traditional socialisation process); and a simple case of settling for the degree. It showed that there were several external factors which influenced their decisions but key among them is the role of an influential other person, parents by far being the strongest influence. Gale (1994) indicates that the knowledge of the nature of construction industry and the career opportunities available within it are extremely important and that not only the students need be educated about the industry but the parents as well because the influence of parents is significant in the career selection of their children. Socialisation of construction students through higher and further education is fundamental to the promotion and maintenance of the image of construction industry.

Career Experiences and Expectations

The experiences of the respondents vary and are dependent on the aspect of the industry they were exposed to. The respondents with good and very interesting experiences were 53%. They are of the opinion that their professions were challenging and tedious but they still derived joy in doing it. They admitted it was hectic working with men but what they know makes them to be what they are right now and it also determines whether they are to be taken

serious or not because people generally believed that women cannot excel especially in a man's field.

6% had bad working experiences all through. They admitted that their male colleagues were intimidated by their presence and they made them redundant simply because they didn't yield to the various forms of sexual harassments thrown their way. They have really struggled to get to where they are right now because they were really segregated and were not promoted like their male counterparts.

Another set of respondents had no career expectations at all but encountered surprises along the way. They are of the opinion that working life is quite different from school, and that the school never prepared them towards what is to be expected in the field. They had to quickly adjust and build upon the knowledge acquired from school. This set is 20% and although opined that more information is required to be disseminated but also ended up falling in love with what they do.

21% of the respondents admitted that they were well prepared for the challenges envisaged within the industry. They had undergone their industrial training in vibrant consultancy firms /construction companies. They were prepared psychologically to fit into the profession and they got a lot of encouragement and support in odd places.

From the above discussions, it is quite evident the women's career experience shows a wide gap between their expectations/perception and their preparedness for the realities of working life in the sector. They were not fully prepared for the nature and culture of the industry in terms of it being challenging, tedious and hectic. They had to really work hard to fit in. These goes to show that the nature/culture of the industry is not gender biased for the women are what they are and the industry is what it is. As succinctly put by Fielden et al. (1999), the responsibility for providing an environment which encourages both men and women to pursue careers within its ranks lies firmly with the industry itself, and it should not

compromise the integrity and safety of those it employs. The findings also confirm the image problem which makes both men and women uninterested in the industry, is compounded by a general lack of knowledge and information about the industry, the career opportunities it can offer and the qualifications that are required (Fielden et al, 2000).

Support from male colleagues

The overwhelming support received from the men confirms Agapiou's study (2002) which indicates the existence of a cultural shift with a growing acceptance by men of women for their contribution on an equal footing within the construction industry. While others through experience are confident of women's abilities and have a protective and welcoming attitude very few are still being territorial and are reluctant to accept women's abilities and skills. One of the respondents narrated how her male employer allowed her to work from home during a difficult pregnancy and she resumed at her own convenience. This happened because she has been able to prove herself as a good worker right from the onset. They noted that the women in the senior cadres have been supportive too and have given a lot of recommendations to the upcoming ones. Though they are quite outnumbered by the men, the few they have had contact with especially in positions of authority have offered them employment in places where they least expected and have been their backbones in claiming their rights.

Challenges

a. **Acceptance as a professional-** The most challenging situation they have had to deal with was being looked down upon when dealing with consultants. Likewise, labourers were not willing to take orders from them especially while on site. While in the office, the first impression people usually have about them is the fact that they are mere secretaries or administrative officers and never a professional. One respondent Quantity Surveyor narrated

how a male Architect called her a secretary who knows next to nothing about the job under question and was willing to wait to see her principal. Unfortunately for him, the principal referred him back to her to resolve the issues with him stating that it was her project and he has no hand in it. She felt really happy about the fact that the architect was made to recognize her as a professional. Another respondent Quantity Surveyor who works with the Nigerian Navy noted that she had to resort to the use of military force sometimes to ensure compliance to her orders on site especially while working in the Niger Delta area of the country. She emphasised that women need not be aggressive but very assertive.

b. **Competition** - The challenge of having to compete with their male counterpart is also paramount because it is generally accepted that women do not have any skill to bring to the fore especially when it is a man's world, and in this case you have to work hard to convince them that you know the job. A respondent narrated how a client who their firm have once worked with specifically requested that she handles his project for him to the dismay of her male colleagues. The competition was stiff but she stood her grounds and accepted the job when they least expected her to.

c. **Self owned practice**- A major challenge is trying to branch out and manage a self owned practice because the desire of all is to excel and be successful. It is always difficult to get jobs. Clients too are sometimes of the opinion that they may not be able to deliver except they work in conjunction with the men. They are of the opinion that the industry should legislate on the jobs to be awarded out giving women a specific percentage ratio so as to encourage women in practice.

d. **Under utilization** - The issue of under utilization comes within their organization. Women are being restricted from travelling far and are also being passed over with regards to some certain jobs. Most organizations believe they will spend less on men in terms of

accommodation and travelling allowances than on women reason being that they have to make them more comfortable than the men. In terms of payment of allowances, women are underpaid simply because the organization are of the opinion that some allowances are basically for the men e.g. housing, and that women will be catered for by their husbands.

e. **Religious norms** - Another challenge though not peculiar to all but comes with the territory is that of being a Northerner and a Muslim. These categories of respondents are faced with the challenge of wearing the appropriate dress to suit their site work. Their religion expects them to dress in a certain way which is not appropriate for the weather especially while on site. The women in this category prefer office based assignments and will visit the site only when necessary.

f. **Financial hardship** - The economic situation of the country also posed a challenge in the sense that to become a registered member of your profession is difficult and expensive. Many have dropped along the way because they cannot afford the cost incurred in such process. The one able to overcome the hardship were supported by their organisations.

g. **Marriage** - Marriage stands as a big challenge to all the respondents. A respondent remarked that *“when you are married you cannot travel far and you also have your children to take care of”*. According to her, *“it is not necessarily a bad thing but their family needs their attention too. When you have small kids you want to be a part of their lives and at that point your career suffers because you cannot put in 8-5 working hours like the men”*. The women stated that it is not always easy for a woman to achieve what a man gets to achieve because the women needs to achieve other things too in some other areas. In their words *“You have to achieve being a good mother, responsible wife and a good worker”*. The women who have risen quickly are those whose husbands are also working within the built environment and they understand what it takes to be in active practice especially when you have deadlines to meet. They have to be able to balance their work alongside being a mother and a wife and

which of course is not easy. A respondent narrated how she lost a pregnancy while travelling through and fro to the site. She later abandoned that particular site and chose the one that is closer to her home.

The challenges faced by the respondents as enumerated are diverse and are deeply rooted into the existing system of the industry. The main goal of the professional woman is to be self sufficient and be able to maintain a thriving practice. This makes the challenge of self owned practice a fundamental one and is becoming increasingly difficult to overcome. According to Adogbo (2014), the challenges built into the construction environment are long standing, deeply seated attitudes, perceptions and expectations and these can only be overcome with time and persistence. Financial hardship, marriage and religious challenges affecting their participation is socialised into the system of the country. All the documented challenges/barriers are completely in tandem with previous research by Nigerian authors, this shows that majority is territorial and is also geographically based on the peculiar culture and nature of our country's socio cultural norms (Kehinde and Okoli, 2003; Kolawole and Boison, 1999; Adeyemi et al., 2004; Omar and Ogenyi, 2004; Adogbo and Ibrahim, 2010).

Overcoming the challenges

In overcoming the challenges, all the respondents acknowledged that proving oneself is no mean task, but with

- a. Strong determination, working twice as hard and being professional at all times has assisted them in making their mark.

- b. The ability to deliver timely within cost limit and showing the system that you can do what the men are doing and most importantly being able to deliver what the system is looking for in you is also paramount.
- c. Being self willed, being confident in their abilities and being good at what they do and also getting people to know that they have the knowledge and that they can assist in a number of ways has also helped to succeed.
- d. Being able to voice their opinion in a room full of men, accepting what they know and what they do not know has endeared the men towards coming to their assistance and lastly
- e. Doing the job the proper way and not because they are the weaker sex is always the key.
- f. Support from senior female colleagues was also instrumental towards meeting their challenges. They are always on hand to assist and offer words of advice when needed.

The challenge of self owned practice and competition with men is a lingering one which is not easily overcome, while the women in overcoming the challenge of work-family conflict in particular, have lowered their expectations in terms of achievements at the work in order to balance their career alongside their family. To them it is a three way thing. Achieving success at work; being a good mother; and also a good wife. They opined that the Nigerian society frowns at a successful woman without a family to support her, which confirms the study of Omar and Ogenyi (2004) where the opinion of one of their respondents was noted as follows *'if a woman becomes a manager, many people in this part of Nigeria will think that she has lost her female identity, and has neglected her domestic duties. It will also mean that she has manifested herself in male personality features. I think a woman is a good human being when she is a good wife and a mother but I have nothing against those who want to struggle for*

power'. This situation as applicable in Nigeria confirms the literature of a foreign research which indicates that women who expect to balance both family and career success in the construction industry may develop lower expectations of the work experience and, consequently, the work-family conflict does not negatively impact upon their organisational commitments. (Lingard and Lin, 2004).

Notable career moments

The notable career experiences of the respondents are as follows

- a. **Academic qualifications** ó being a member of their respective professional bodies according to 25% of the respondent is a boost. This they feel may not have been possible if the system had not been competitive. This is also to prove that they are also capable of attaining the highest level of professionalism as much as their male counterpart.
- b. **Recognition** ó when people know that you are a professional in a man's world, it creates an intelligent, hardcore and strong willed person in the minds of people. 75% of the respondents have enjoyed moments such as when they go to site, the aura they exude, the respect they command, the look of awe on the faces of others encourages them to do more and excel. A research conducted by Gale (1994) described these feelings properly where the author wrote *“that the few women who have enjoyed a career within the construction industry are fitting in, promoting the process, and seeking to remain within their comfort zones thereby carving out for themselves special niches within the industry”*.

Some of the respondents have been able to carve out a niche for themselves e.g. in the aspect of designs and have become a force to be reckoned with in the industry. Being

recognised by men as an equal in the field and a hard worker but not has a woman is a fundamental achievement.

- c. **Giving instructions** ó being able to give instructions and call the shots just like the men is also an achievement. Being able to carry out their duties, appreciate and value properties within the built environment, seeking their opinion on cost matters and adopting it without question is an important boost.
- d. **Accomplishment of projects** ó *õbeing called upon to undertake huge projects bigger than what you have envisaged and seeing your design /work come alive in buildings” according to a female Architect õis a joy indescribable. I keep asking myself over and over whether it was really my design that turned into this beautiful edifice any time I enter the building for supervision”.*

To the other respondents, the different types of jobs undertaken and executed properly, breaking grounds to be well respected, efficient management of sites, being strong willed, good construction practices, beautiful workmanship, timely delivery, efficient management of materials on site and commanding respect for a job well done are notable and exciting experiences. Doing new things according to them makes life very interesting. Those in the academics are also fulfilled when they see their students doing excel in their chosen endeavors.

- e. **Mentoring**- some of the respondents are proud of being able to employ and train female professionals within and outside their organisation. They are happy seeing them progress in their career and are willing to do more. They have fostered good relationships between their organisations and their professional bodies for their mutual benefits.
- f. **Conducting site meetings** ó some respondents are really on top of the world when asked to act as the chairperson in site meetings because the clients/architects know

they are knowledgeable and are worth their salt in practice. They are happy when some consultants actually remark that they would not hesitate to work with them in future when the opportunity arises. A respondent remarked that *“I was overjoyed and fulfilled when I overheard the architect telling my principal that he has really enjoyed working with me”*. A few of the respondents went further to add that they are happy when the men they have worked with actually recommend them for other jobs.

Men who have had experience of working with women find they are capable, they fit in well with male colleagues and they contribute to a quality outcome Agapiou (2002).

Regrets

The basic regret /limiting factor for these women on their career experience were the issue of making less money than envisaged. They were all so emphatic about it and some actually thought of leaving the profession for a better and lucrative one. This finding highlights that the issue of money should be recognised as a barrier to women’s career progression within the construction industry and no wonder Amaratunga et al. (2006) concluded in their research that it would be illogical not to include money as a reason for women leaving the industry. The experience of the women also showed inadequate career guidance and counseling. They decried the issue of proper guidance to diversify into fresh areas where they can excel and showcase their talents properly especially those with creative minds. The other regret for some was not being able to make out time to advance academically.

The industry being equipped to accommodate women

The various women association groups within the industry have been established to nurture, and encourage women within the construction industry. The respondents all acknowledged the existence of these associations but opined that they have not been vibrant enough to

create the needed awareness necessary to endear female participants into the construction industry. These associations are tasked to represent and reflect the industry the way it is in their campaign and new entrants should be informed that various industries exist with their corresponding challenges. They also agreed that the construction industry as a body in Nigeria is yet to legislate on the duration of maternity leave and equal opportunities, or to stipulate a percentage of male /female employees an employer is expected to comply with in order to bridge the employment gap between both sexes. Women can capitalise on such provision if they exist as an entry point into the industry.

The women noted that a lot is still required to be accomplished for the industry to be fully equipped to accommodate women. The women associations are yet to be firmly rooted for a continuous and sustained campaign targeted at new entrants and also to those already in practice. It was noted that many have opted out of practice immediately they graduate from school, reasons being the perceived hardship to be encountered in practice. They do not give back to the industry and society what they have been opportune to receive in respect to the knowledge amassed. The Federal Government since 1994 encouraged equality of opportunity within the civil services throughout Nigeria. This is beneficial to the women within the civil service while their counterparts in the private sector are left unaided. The promotion of gender equality is now globally accepted as a developmental strategy and the MDG Goal 3 which is 'achieving gender equality and women's empowerment' among others still faces a number of challenges of which 'employment prospects for girls as well as women' is of paramount here. Dainty et al. (1999) noted that the apparent incongruity of women's initial perceptions of the construction industry, and the realities of developing a construction career, leaves doubts as to whether women should be attracted to an industry ill-equipped for employing them, while Gale (1999) also noted as a moral issue that it is not

right to encourage women into an occupation whose nature of work and environment is unfriendly.

Encouraging women into the industry

The respondents all agreed that encouraging women into the profession is good but not an easy task to accomplish. When asked whether they would like their daughters to study a career within the profession, majority emphatically said no giving reasons that they wouldn't want their children to go through what they have been through to succeed. Despite these reasons they all agreed that we still need more women in the construction industry for women have special roles to play especially in filling the already existing loop holes. A male decision or suggestion when incorporated with that of the female looking at it from a different perspective balances the equation or the design better than a single personality especially in a sensitive design.

The architects went further to expatiate this argument by giving the example of where there is always a distinction between a female's design of a maternity home/residential houses and that of the male. The women are always generous with their allotment of kitchen spaces and are considerate in the designs of their maternity homes because they have a firsthand experience of their requirements and needs. Most of the designs done by the men are lacking in the basic requirements and are not suitable at all. The women are better in organizing where the wards should be and their proximity to each other.

Some of the respondents also remarked that there is need for women to be encouraged to pursue careers within the academic sector of the construction industry so that they can chaperon female students and encourage them further in their studies. They mentioned the fact that the few female lecturers they had when they were in school encouraged them not to

relent in their efforts to succeed especially when they were at the brink of abandoning the industry.

They noted that the established women should help to cultivate the careers of other women by recommending them for jobs and offering advice when they need it, and that career talks should be organized at secondary school level highlighting the range of opportunities available within the industry.

Some of the respondent posited that in order to attract and retain more women into the industry, the few women within the industry right now should try and seek for elective positions while those already in the position of authority especially within the industry should endeavor to lead by example, be good ambassadors of other women and champion the cause for women so that young and new entrants into the industry will look up to them as role models. The solution propounded by this women was acknowledged by UNESCO (1995) that women's legal status has changed tremendously and this should enable them improve the conditions under which they participate in various national economies. They stated that these positive achievements and strength of the industry with time will speak for it such that we need not cajole anyone but rather they may be convinced to undertake a career within it.

The experiences of these professionals indicate that a mixture of both male and female talents when put together gives us the best result and when equilibrium is created in the field, the industry is more productive and vibrant. These they believe will reduce the problem of corruption because women are known to be good managers and are prudent with money (Kehinde and Okoli, 2004). Women are more disciplined and are very conscious of being a role model to their kids and the entire society.

CHAPTER 5: CONCLUSION AND RECOMMENDATION

5.1 SUMMARY OF FINDINGS

Objectives I: the challenges to women's participation

- i. The challenges of having to compete with their male counterpart for a lucrative job and setting up their own practice are fundamental and are not easily overcome.
- ii. The women in overcoming the challenge of work-family conflict have lowered their expectations in terms of achievements at the work in order to balance their career alongside their family. This attitude did not impact negatively on their careers.

Objectives II: their notable and career satisfying moments

- iii. The notable career experiences of these women have greatly overshadowed their challenges and their achievements have not gone unnoticed within the construction industry. They have enjoyed their career greatly and to them the challenges were surmountable.
- iv. Success in the perspectives of the women is rated in three ways. Achieving success at work; being a good mother; and also a good wife. They pride themselves as a role model to their children and cannot afford to relent in their efforts to excel in all aspects.

Objectives III: their career experience and expectations

- v. The women's career experience showed a wide gap between their expectations/perception and their preparedness for the realities of working life in the sector. The earlier the students are allowed to know the reality of the practical aspect of the industry, the better they are prepared to face it in practice.

- vi. The experiences of the women are not peculiar to them because they are women but because it is general and applicable to both sexes except that men can adapt easily and faster than the women. This shows that the nature/culture of the industry is not gender biased. The women are what they are and the industry is what it is. This goes a long way to demystify the mystery of the male only image.
- vii. The issue of money should be recognised as a barrier to women's career progression within the construction industry.
- viii. Existence of inadequate and proper guidance towards diversification into fresh areas within the construction industry.
- ix. The industry is yet to be fully equipped to accommodate women, but it is not a basis for discouraging women from participating in it. Equal participation creates the physical environment that enriches our lives.
- x. It was noted that the positive achievements of the women will speak for the industry such that we need not cajole anyone but rather they may be convinced to undertake a career within it.
- xi. It was agreed that the positive and masculine culture of the industry should be emphasised such that those who seek to be a part of that reality will undertake courses leading to careers within the industry.

Objectives IV: Guidelines for enhancing women’s career within the construction industry

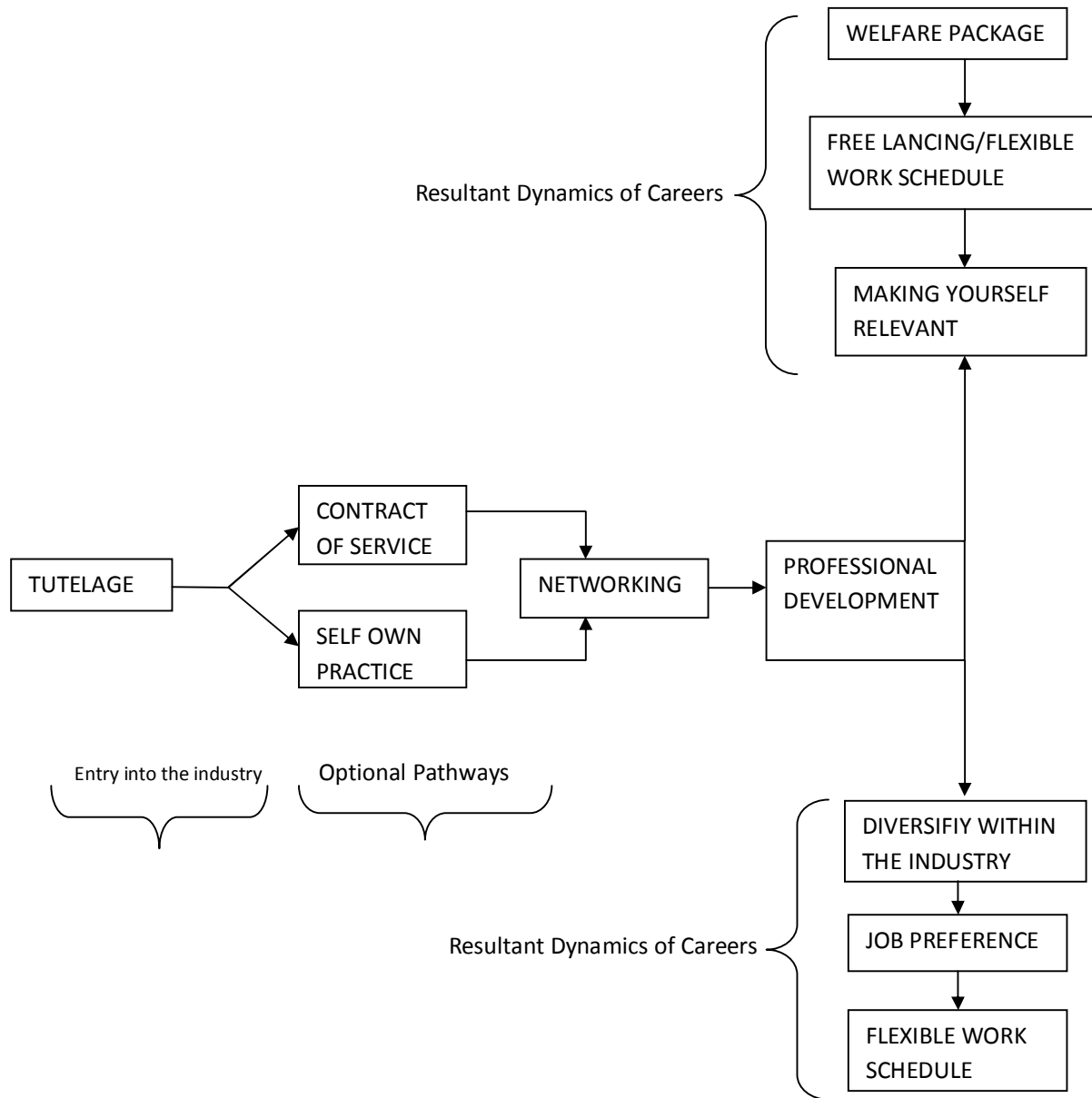


Figure 5.2: PATHWAYS/ PRACTICAL CONSIDERATION OPTIONS

Figure 5.2 shows the guidelines for women in practice starting from their entry point into the industry and showing the alternative pathways that women can follow in order to develop their career. The figure depicts that women can either choose to practice on their own after going through the normal tutelage at the start of their career or earn wages by working in the private or public sector of the industry.

Whichever path is chosen, women are advised to collaborate with each other through networking and also develop themselves professionally. This will give them an edge within the industry.

For those under employment of services, they are encouraged to make themselves very relevant within their organization and become proficient such that they can arrange for a flexible working condition or freelancing in order to be able to balance their work alongside their family commitments.

Through freelancing, women can choose to work for a particular period and be paid and it also gives them the opportunity of working in several places without any strings attached. They can create their own pattern and flexibility in work schedule i.e. working from home to enhance their productivity as they desire.

The women in self own practices are encouraged to diversify within the industry. There is need to explore possible fresh areas that are less concentrated by the men. The women are also encouraged to compete healthily with the men to unleash their abilities and capabilities. By so doing, women can select jobs based on their preference and have a flexible work schedule as one of the benefit of being at the helm of affairs.

5.2 CONCLUSION

The future offers the construction industry exciting opportunities and the industry can no longer afford to miss out on the contributions that women can make especially in the highly competitive market for talents. It is obvious that the Construction Industry needs diversity which in turn promotes creativity, and in order to compete successfully in today's global market there has to be unleashing of the full potentials of the entire workforce.

The professional women understudied here have emerged with their head held high amidst challenges to their growth within the industry. They have sacrificed so much and what has got them going is the interest and love for the construction industry as a whole. The positive aspects of their career have greatly overshadowed the challenges such that at a point, the barriers seem to be nonexistent.

The study shows that the career experiences of women in terms of the joy and excitement derived from the different types of jobs undertaken and executed properly, breaking grounds to be well respected and commanding respect for a job well done and accomplishments well acknowledged within the industry are major attracting factors which can enhance the participation of women within the construction industry.

The study also shows that proper dissemination of the opportunities available within the industry for women and the successes attainable within can increase women's participation. This will ensure a steady flow of women as a work force within the construction industry.

5.3: RECOMMENDATIONS

- a. Diversification - women should narrow themselves and be innovative. They should look at other things like branching out to other areas of their profession other than construction and make themselves relevant. There is a need to explore possible fresh areas and bring out new ideas which can be sustained in Nigeria like landscaping, developing different types of material, interior designs like furniture, the design of toilets and bathrooms, academics, consultancy, etc. they can specialise on some particular area and be perfect in it. The application of better solution that meets new requirements and articulated needs of the existing market is very necessary. This will help in reducing the competition with male counterpart.
- b. Empowerment of women- Government legislations that will enhance women empowerment is necessary. This will encourage independence among the women folk in terms of establishing their own practice.
- c. Dissemination of information- good news and the strength of the industry can be disseminated especially through women. The positive and masculine culture of the industry should also be emphasised such that those who seek to be a part of that reality may be well prepared for the working conditions within the industry. This can be done by showcasing successful women within the industry and getting them to talk about their career satisfying moments to the young ones in order to correct the negative image of the industry. Proper career guidance is also required at secondary school level.
- d. The industry should assist and further enhance the capabilities of the various women group in meeting their various objectives. It is a way of equipping the industry to accommodate women.

- e. Self Owned Practice- Women should think about establishing their own firms where they can easily direct and be in charge. Women should exhibit boldness and confidence and cast away timidity while exploiting legitimate opportunities to foster their career potentials. They should not be afraid of obstacles and failure, failure is a stepping stone to success. It will be easier if they are in charge in the office while the men go to the field on their behalf.
- f. Elective positions- women should seek for elective positions within and outside the industry. This opportunity could be used to champion the cause for women.
- g. Professional development- women in practice should make out time to develop themselves professionally and academically. This will give them an edge over others and make them more relevant in the profession.

5.4: Recommendation for further studies

- a. An empirical research is required to be carried out on women in self owned practice to determine their sustenance rate and challenges faced in job procurement within a highly competitive industry.
- b. The Nigerian construction industry is to also be assessed in order to establish its existing level of acceptance of women's capabilities and ways by which it can be fully equipped to accommodate women.

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APPENDIX I: INTERVIEW GUIDE

OBJECTIVE: To highlight the positive career experiences of women in professional practice within the construction industry and elicit alternative career pathways for new female entrants.

1. GENERAL QUESTIONS

(a) Name

(b) Marital Status

(c) Profession e.g. Architect/QS/Engineer/Builder

(d) Name of Organisation

(e) Number of years in active practice

(f) Membership of professional body

2. CAREER CHOICE: Why did you choose a career in the construction industry?

3. CAREER EXPERIENCE: What is your career experience like over the years? Would you say it was something you had envisaged or there were surprises along the way!

4. BARRIERS TO WOMEN'S CAREER: It has been well documented that there are barriers to women's career within the industry such as segregation, underutilization, and sex discrimination etc. In your own case what are the challenges that you have faced so far?

5. OVERCOMING CHALLENGES: how did you overcome these challenges and was able to make it thus far without abandoning the profession for a less strenuous one.

6. CAREER STAGES: Research has shown that there are three basic career stages in life i.e. the entry point, the progression stage and the terminal stage. Concentrating on the progression stage, I would like to know about the notable / positive career experiences you have had during your career progression stage. It could be something that has probably boosted your ego as a woman within the industry or something that has made you stand tall and say yes I am a professional and I should be reckoned with?

7. Do you have any regrets at all having come thus far?

8. ENCOURAGING WOMEN INTO THE PROFESSION: Research has identified that women generally are underrepresented within the construction industry. In your own opinion and experience so far, do you think women should be encouraged to pursue a career within the industry?

9. Or in the alternative do you think women are ill equipped to **face** the stress and the demands of the profession?

10. Is the Construction industry well equipped to accommodate women?

11. What in your opinion could be done to make women's career within the built environment more progressive so as to attract more women into the industry

12. The image of the industry is negative so much so that women are not encouraged to pursue a career within it, what in your opinion should be done to improve such image so that we could have more female participation?

