



DETERMINANTS OF WOMEN PARTICIPATION IN CONSTRUCTION PROJECTS IN KENYA: A CASE OF THE JUDICIAL PERFORMANCE IMPROVEMENT PROJECT, NAIROBI COUNTY

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ABSTRACT

The aim of this research was to investigate women's participation in construction projects in Kenya, specifically in the Judicial Performance Improvement Project. Women in construction are seen as the wrong gender to be around, for the construction professions involve not only labour-intensive dexterity but physical strength. Currently, the trade is employing less than 10% of the women in the labour force. This project discussed the current women participation in construction focusing Kenya, and in particular the JPIP project. Additionally, issues and barriers inhibiting women entering and retaining in the industry was also discussed. This study adopted a descriptive research design because it involved fact finding enquiries and surveys with the sole purpose of describing how things are presently, without the researcher having control over the variables. A regression model was applied to analyse the extent of the significance of the relationship between the dependent and independent variables. The population was those involved with the Judicial Performance Improvement Project, specifically the construction component, with a total of 89 people. Samples were drawn using a census as the sample size was very few, giving a sample of 89 people. Questionnaires and interviews were employed to collect data. The data obtained was analysed qualitatively and quantitatively using descriptive statistics, and a multiple linear regression model was used to model the data, and to analyse the extent of the significance of the relationship between the dependant and independent variables. A strong conclusion from the paper was that it is not the technical expertise that needs demonstrating but rather encompassing their individuality as women to meet the demands of the workplace and having the aptitude to fit into the recognised conduct of the workplace. There was also disquiet among the female workers of having to set of scales between successful career and family lives. Lastly, the paper highlighted recommendations to form a better path for women's participation and retention in this male-dominated area. Among them are bringing more female role models to aspire career in construction, stronger equal chances at the workplace and stronger roles of the social partners.

Key terms: Social cultural Perspectives, Organization Barriers, Training and Development, Gender Stereotypes, Women Participation

INTRODUCTION

The construction industry is not only the most male dominated of all the industries in the world, with over 84 per cent of its worker's male, but it also seems to exhibit the highest degree of vertical segregation. Until today the construction industry with its great gender stratification is still conventional in its conscription of women. The predominant social conditions reinforce the work-related discrimination of the workforce into masculine and feminine jobs as imperforate today, with construction as the main example. Majority of women working in the construction industry carry out clerical work while the consumption at the operational and implementation level is very low and the data are scarce to non-existence, but in most countries these represent less than 1% of the workforce (Clarke et al., 2005).

Inexorably, it can be established that construction is not only male-dominated but is bereft of female participation. There are many studies deliberating the reasons why female workers shy away from the construction industry entirely (Wangle, 2009; Chandra & Loosemore, 2004; Agapiou, 2002; Whittock, 2002; Fielden et al., 2000). Among the common barriers are social approvals of employment, sexually-inappropriate profession, sexual discrimination, sexual harassment, physical incapacity, and labour conditions such as, unsociable work-hours and exposure to dangers. Contrary, there have been few studies focusing on factors influencing women entry into construction and what their prospects are (Fielden et al., 2000). Studies show that the construction industry's old-fashioned, blue-collared, male-dominated culture represents a substantial barrier to women recruitment, participation and career progression. The following are concerns and barricades opposing the women participation: The traditions that root the frequent dispute are that women are not physically strong to withstand this strenuous task (Clarke et al., 2004). On top of demonstrating their technical skills, women workers need to have the capability to fit into the

recognized behaviour of the workplace which can even be more difficult. Women curiously run a bigger risk than men of work-related musculoskeletal disorder (MSD). Studies have shown that women are twice as likely as men to leave the industry because of grievances of pain and injury (Wangle, 2009).

Furthermore, the whole workplace culture poses difficulties to female workers on site. For example, temporary sanitary facilities are usually unisex, often without privacy and generally not well maintained. Unclean facilities can result in disease as well as urinary tract infection. Female workers also complain about the ill-fitting personal protective clothing (PPC) and personal protective equipment (PPE) that are not to size or does not fit which eventually can compromise personal health and safety.

A study by Occupational Safety and Health Administration (OSHA), (2009), revealed that most tools, equipment and clothing are not designed for a women's physique. The same study by OSHA also state about inadequate information on the extent to which female construction workers are exposed to reproductive hazards in the workplace (Olofsson, 2004; OSHA, 2009). The dislike against women was demonstrated in obvious and secret discriminatory behaviour towards them (Dainty et al., 2000). These actions oscillated from overt gender harassment and intimidation where women workers face the problem of not reporting verbal jargons and brashness for fear of being rejected by their male colleagues (Söderberg, 2009). In a study performed by Novus Opinion in Sweden, it is not only the jargon that is making the situation difficult but also distrust towards female leaders. 49% of the female leaders feel an attitude obstruction against them by the male workers and colleagues are making their job difficult which eventually leads them to leaving the industry (Axelsson, 2010).

Participation as a concept in project management helps in increasing efficiency, effectiveness, self-reliance, ownership, replication, as well as

sustainability of projects. Trades in the construction industry are lacking the advantage of providing and accommodating workplaces that mirror the demographics of the culture they serve. The construction industry is the second principal earning industry in the world; yet female construction company employees are considerably underrepresented (Axelsson, 2010).

The construction industry in Kenya has a particularly important role in the Kenyan economy in terms of the production of the country's infrastructure and fixed capital assets, contributing up to 5% of the country's GDP and employing close to 2 million people. According to a report by the Kenya National Bureau of Statistics (KNBS), the economy of Kenya was amplified by 4.9 per cent in the first quarter of 2011 due to the enhanced production in the construction industry. This can be accredited to higher public investment in infrastructure by the Government of Kenya (African Economic Outlook, 2012).

There are numerous gender barriers concerning constraints and opportunities faced by women in implementing projects in the construction industry. Women's employment is closely connected to gender customs emphasising unpaid household work and child care as female work (Floro & Komatsu, 2011).

The Constitution of Kenya provides unique opportunities for the transformation of the judiciary, including the basis for the judiciary's independence. However, in the recent past, the judiciary suffered very low confidence and trust from the public, a state which was marred by the recent post-election violence and the results of the 2007 presidential elections. With these new opportunities, the Judiciary Performance Improvement Project (JPIP) was launched to help with the transformation of the judiciary. One of the components in the project is court infrastructure. Over the six-year period, the project was to support the construction of eight

High Court buildings, the refurbishment of approximately 30 magistrate's courts, the construction of two magistrate courts and the supply of at least 20 demountable or temporary courts.

Statement of the Problem

In 2014, the Bureau of Labour Statistics reported that there were 9,813,000 people working in the construction industry. Of these, 872,000 of them, or 8.9 percent, were women. A survey done by the Kenya National Bureau of Statistics (KNBS) (2014) showed that there were 1,067,000 men in the construction industry, and only 236,000 women in the same field.

Further, a study done by the National Gender and Equality Commission (NGEC) in 2015, showed that only 15% of women take up wage employment in manufacturing, building and construction, electricity and water sectors, and in 2015, the International Federation of Building and Wood Workers ascertained that Kenya has the second lowest women representation in the construction sector (2.5% women) compared to 97.5% men, partly due to lack of a gender policy to promote women in union leadership roles; also, may be due to gender and age restriction for women and the youth in categorized work in construction.

According to English and Le Jeune (2012), the barriers to women in the construction Industries continue to exist and can be characterised as being a lack of knowledge about the business and thus, poor image; the effect of societal roles and cultural beliefs and traditional roles and thus, lack of role models; and from the industry's side, poor remuneration, discrimination, hostile work conditions and a male-dominated culture.

In the construction industry in Kenya, a deficiency of knowledge of occupation opportunities and the problems of working in a male-cultured, occasionally prejudiced environment, are some of the main barricades to women's employment and

retention in the sector. The construction industry globally is observed negatively as a desired place with females, in particular, finding the work culture unaccommodating (Dainty and Lingard, 2006). Part of the undesirable view is also that historically women's effort received lower pay than that of men (Clarke and Wall, 2004), nearly only 80 per cent that of men's pay. In addition, other drawbacks remain for those endeavouring entry into, and wanting to build careers in the construction: training, lack of participation and career development (Dainty et al., 2000). Nevertheless, few studies addressed the issue of lack of women in construction projects in Kenya. In view of the above, this study sought to investigate the factors affecting women participation in construction projects in Kenya.

General Objective

The main objective of the study was to examine women participation in construction projects implementation in Kenya. The specific objectives were:-

- To assess the influence of social cultural perspectives on women's participation in construction projects in Kenya
- To examine the influence of organizational barriers on women participation construction projects in Kenya
- To determine the influence of training and development on women participation in construction projects in Kenya
- To assess the influence of gender stereotypes on women participation in construction projects in Kenya.

LITERATURE REVIEW

Theoretical Review

Cornwall's Theory of Participation

Cornwall's theory of participation was developed in 2002. The theory argues that participatory spaces can be fashioned in order to permit people to interrelate and to deliberate issues of their concern as well as to achieve social responsibilities. These spaces can change from

time to time and from one setting to another. This could be through creation of new laws or revision of the previous laws or by engaging people in meetings and social hubs. However, power and differences among the society may permit or limit operative participation. This is because participatory spaces gather societies from diverse backgrounds and with diverse identities.

Cornwall's theory of participation helped to examine created spaces that were introduced by JPIP project and how they have helped to influence women's participation and to understand how power and differences within the community have encouraged or discouraged women's participation in construction projects. This theory addressed the issues of socio-cultural perspectives, as spaces of participation, to ensure women participation in construction projects.

The Theory of Constraints in Project

Management

Developed in 1980 by Goldratt, the theory of constraints (TOC) hypothesises that constraints establish the limits of performance for projects or system. TOC focuses on understanding and dealing with the constrictions that stand between projects and the accomplishment of their goals. Once the project constraints are recognised, in order to achieve optimization of the total project resources, all the non-constraining resources of the organization are subordinated to the needs of its core constraints

According to Eliyahu and Goldratt (2010), constraints are categorised as capacity and logistical, behavioural or managerial, with each of these having its own influence on the smooth process of the organization. TOC suggests that if processes and organizations work together as chains or flows, the weakest links can be established and strengthened. All systems function in an environment of cause and effect. Capturing the core of cause and effect within the organisation and recognizing measures that imitate these relationships are the keys to

enhancing system performance. Most of the constraints encountered in systems originate from policies.

Policy constraints are possibly more damaging than physical constraints, yet are much more difficult to identify and deal with (Ruhl, 1997).

In order to improve performance, organisations need to appreciate and focus on the total system influence of a decision or event, not just on its resident or immediate effects (Cox & Spencer, 1998). TOC highlights the significance of constraints over the position of project costs. This theory was used in this research to evaluate organisational barriers such as wages, and organisational culture, and how these influence participation of women in construction projects.

Kabeer's Theory of Women Empowerment

According to Kabeer (2001), empowerment is the expansion of people's ability to make strategic life choices in a context where that ability was previously denied from them. She identified resources, agency and achievement as three interconnected factors which can impact on women's empowerment process. From this aspect, she argued that resources (human resources, material resources and social resources) could magnify people's ability to make decisions and to perform, but this can be conceivable only if people are willing to take action jointly or independently. This occurs through levitation of people's perceptions about the prevailing situation and creating social networks for support. However, poverty and present social norms and values can obstruct the empowerment process. Moreover, empowerment can lead to conflict among family or community members. This theory addressed the issue of training and development as a tool and resource for empowering women to participate in construction projects.

Theory of Project Implementation

This theory was posited by Paul C. Nutt in 2006. Nutt postulated that project execution is a series

of phases taken by responsible organizational managers to plan change procedure to produce compliance needed to install changes.

This occurs when these managers create project environments in which desirable changes can survive and can be rooted in the project industry the project is being implemented in.

According to Bao et al. (2011), implementation can be seen as a process used in forecasting change procedure that lays out steps taken by the whole participants to support change in the project and the project environment. (Bao, Sheng, Bao & Stewart, 2011). The PMBOK also highlights features of this theory through the argument that change management must address an assortment of activities that pays strict thoughtfulness to the human, political and organizational inclination as variables that can influence the success of projects and programs. Change management perceptions, whether they come from diverse stakeholders, or from scrutinizing the predicted impact certain design decisions will have on the organization, are precarious to the project planning and execution process (PMBOK, 2013). This theory was used in this study to relate the effects of gender stereotypes for example male chauvinism, and gender equality to influence participation of women in the construction industry in Kenya

Theories of Construction Project Management

Koskella (2000) probed the theoretic basis of construction project management. The theory of construction management aims to undertake construction projects efficiently. This theory was discussed in detail by de Valence in 2011. The highlight of this theory seems to be mainly on the variety of approaches and procedures available to improve the efficacy with which construction products are delivered, though many of these yields are management decisions or plans.

Radosavljevic and Bennett (2012) suggested a theory of construction management which recognizes the activities which help construction

projects and corporations to be effectual. It takes on the challenge of generating a detailed, firmly defined ideal of construction management (CM), using five visibly distinguished methods for the delivery of building and construction projects. Radosavljevic and Bennett (2012), argued that construction is diverse, because it is multifaceted: projects have a variety of interrelating teams where results in the future are contingent on the amount of intricate teams, the eminence of relations between interacting teams and their performance variability. In addition, there is also volatile interference which may arise from several peripheral factors.

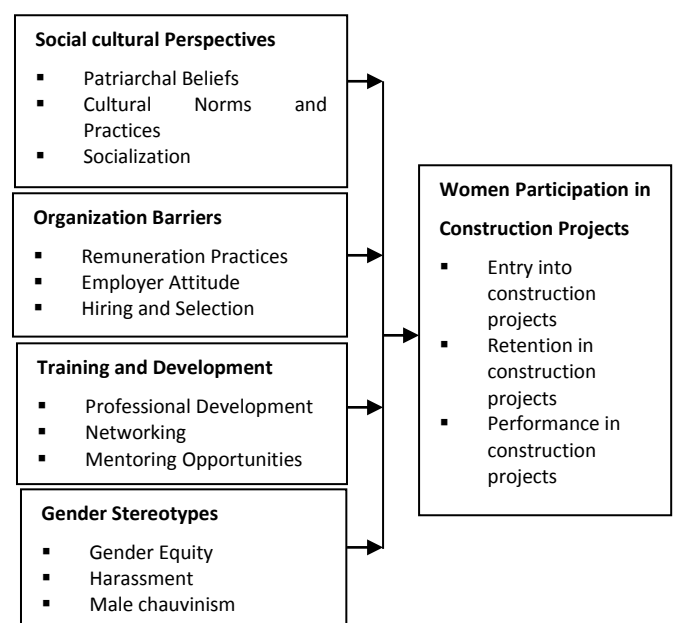
The theory identifies six indicators which are the essential variables in the theory of CM which are: established relationships (consequential relationships between interacting teams that existed before the project started); relationship fluctuation (differences between times during the project with and without established relationships between teams); relationship quality (time teams have spent previously working together); relationship configuration (the pattern of team interactions over the project -this is a quite complex indicator because it can vary greatly over time, i.e. during a project); performance variability (team performance may not be consistent between projects); external interference (factors outside the control of the project managers).

It also identifies a construction management approach used to deliver construction projects, which are traditional construction includes the UK's "developed traditional construction" or architect led version, and the US (specialist contractor design) and European (architect and engineers design) versions; design builds, which is a single point of responsibility for delivery of the project; management approaches including the design and management teams working under the general direction of the client; partnering, which concentrates on establishing effective relationships rather than roles and responsibilities, and can be a strategic or ongoing

relationship; and total construction service for example industrialised building modelled on car manufacturers with an emphasis on reliability, quality and continuous improvement.

These theories were used in this research to evaluate social cultural nature of relationships, and the roles and responsibilities of such relationships in the construction industry and how they influence women participation in construction projects.

Conceptual Framework



Independent Variable **Dependent Variable**

Figure 1: Conceptual Framework

Social Cultural Perspectives

From the beginning of his /her birth, each person confronted with expectations for his/her, behaviour as defined by the society in which he/she is expected to adapt and confirm to those behaviours that designated appropriate to their gender (Avery, 2008). In the eyes of parents, the social expectation of females is less than that of males.

The socialization process of a girl at home may interfere with her future achievement rather than in force it.

It is recognized that in the majority of societies women are viewed as less equal to men as the result of socialization process (Bradley & Healy, 2008). In each society certain tasks are deemed suitable for men and women. Tasks associated with males usually have higher status and value than those associated with females (Watts, 2009). At large societal desired behaviours, the temperaments between the two sexes formulate distinctive personalities for men and women bring stereotyped masculinity and femininity in their personality and activities. Hence, males considered intellectual and performs the role of dominating. On the other hand, females are seen passive, docile, ignorant and ineffective (Annis, 2008). This socialization process oriented behaviour makes females to obey men's dictation and follow the leadership of male (Bagilhole, 2014). The existence of role-prejudice, which is developed and adopted through socialization in every country, has therefore, limited men and women to certain roles and life patterns (Bradley & Healy, 2008).

Socialization and gender stereotyping have also been regarded as additional internal barriers faced by women (Powell, 2000). Women are limited by social expectations, parental guidance and self-aspiration. Men are more often socialized to persevere and seek professional success while women are socialized to nurture and support others as they assume the traditional role of mother and caretaker of the home (Sadeghifar, 2003). The socialization process of females perpetuates notions of the inferiority of the female gender. Women have typically been perceived as being weak, and generally not robust enough for the difficult, intensely political nature of educational administration (Virginia, 2007).

Patriarchy has been defined as a system of social structures and practices in which males' dominant oppress and exploits females (Mohamed, 2005). In the same way, the patriarchal oppression, and the mobilization of bias effectively silences women's demands to involvement of masculine jobs. In addition, endocentric patriarchal ideology

denies the women leaders and neglects their placement in ranking positions (Clarke & Wall, 2014).

Culturally, the society is patriarchal. It portrays women as inferior to men and the division of labour is stereotypical. Women who do not perform domestic roles are viewed as deviants making it difficult to assert themselves when it comes to seeking positions outside the home (Virginia, 2007). In addition, women carry out almost all the reproductive roles of the households as well as many of the productive roles which are usually voluntary and unpaid. In many cases, this is used as one of the reasons to justify that women do not have the time to participate in 'masculine' projects (Annis, 2008).

Most cultures define women in terms of what they should be or do for men. For instance, a married woman's major role is to enhance her husband's career goals by providing him with moral and emotional support. She is left with all the family responsibilities and chores while the husband is away either studying or working (Sadeghifar, 2003). Women can pursue their professional dreams only after fulfilling their culturally accepted roles, an expectation nearly impossible considering at what age this would be happening (Kamau, 2006).

In most cases a typical woman has low status particularly lack of power to make decisions on matters affecting her life and those of her family.

This culturally determined expectation and attitude towards the girl child influences less allocation of resources towards the girl as compared to the boys. A boy will always be considered first before a girl (Bagilhole, Dainty & Neale, 2000). This gender biased cultural assumption and the subsequent differential treatment of boys and girls in a homestead not only mitigate against girls' access and performance in the education but also tend to push girls to doing the so called 'feminine careers' for instance home economics, nursing, teaching and secretarial (Catalyst, 2001).

Organizational Barriers

According to Bradley and Healy (2008), organizational structures especially job assignment are designed to prevent females from ascending to the construction project related work. Job assignment is considered to be the primary condition for career participation of females to participate to the leadership position organization. Organizational structure "steer away" females' potential for upward mobility by confining them to work roles that are considered to be females' occupation. Hence, the quickest way to motivate women participates in construction projects is placement in functional areas or crucial job assignment that leads to the accomplishment of critical project related organizational tasks (Annis, 2008).

Different projects have different cultures, in which they will draw boundaries around what is included and what is not (Thiel, 2012). A masculine culture is likely to be dominated by power relationships and a results-orientation while a feminine culture is likely to be more concerned with interpersonal relationships and a process orientation. The culture of project-based industries is inherently masculine fostered through language and behaviour (Dainty, Neale & Bagilhole, 2000).

Organizational hiring Practices at the Bottom Entry-level jobs are critical in establishing career trajectories in organizations because promotional ladders, where they exist, are connected to specific points of entry into the organization (Watts, 2009). Job recruitment and hiring practices used by employers often result in females being placed in jobs that have short or non-existent job ladders. This is an important barrier limiting females' participation beyond low-paying jobs. Such practices, in conjunction with the difficulty of changing career paths once employed in an organization, perpetuate the existence of female job ghettos that are low-paying and cut off from mobility channels (Hauschildt, 2000). Zahidi and Ibarra (2010), concluded that employers use recruitment and

hiring methods that have worked well in the past because they help to avoid costly hires of unsatisfactory workers. Hiring practices in entry level jobs determine access to ladders. Statistical discrimination, as this is formally called, is based on stereotypes about appropriate work roles for females and males, which the public, employers, and most females readily accept (Mohamed, 2005).

Byrne, et al (2005) stated that women (or minorities or any other group) seek jobs that they perceive they have a chance of getting. Because individuals make choices in the context of what they perceive as available opportunities, employers' administrative procedures for recruitment, hiring, and job assignment that support gender, racial, and class stereotypes about appropriate work roles contribute to job segregation in entry-level jobs. Thus, "choice" is not the barrier to greater opportunity; instead, employers' acceptance, and indeed their exploitation, of uninformed choices is the barrier to future upward mobility (Mohamed, 2005). In addition to discriminatory hiring practices, and lack of networks, the lack of role models has been cited as another affecting.

Women do not have access to a large number of appropriate role models, and, as a result, women may not even give administrative posts consideration (Cooper, 2008).

Training and Development

International Labour Organization report (2000), drew attention to implications of government's reductions on educational budgets which have resulted in fewer girls and women attending classes and higher dropout rates for girls. Structural adjustment and economic restructuring programmes reduced educational and work opportunities for women. This had implications for women's opportunities to accede to management-level posts, given the importance of education in helping to create a new concept of power, less stereotyped, less focalized on hierarchical aspects and more open to women.

According to Kamau (2004), limited access to studies is the main hindrance to women career advancement in universities. Without a doctorate there is no hope of rising to seniority in the universities. Obtaining a doctorate for women in Kenya is usually much more challenging than it is for men especially because the country does not have very well established doctorate programmes; they are also in limited fields. The best option is to study abroad which is a major challenge to women given their social roles as wives and mothers. The only option is for women to study locally, which presents a new challenge of combining career, family and studies as negotiating for a study leave is not easy. Funding for doctoral studies is one issue that has discouraged many women, as funds are not easy to access. Odhiambo (2006), observed that in Nyanza province out of the top a hundred students in the year 2005 Kenya certificate of primary education (KCPE) results only one was a girl.

This kind of imbalance in primary education results to imbalance in advanced education, which consequently results, to imbalance in appointments. When development opportunities for women within work organizations are limited, external activities should also be considered as avenues for development opportunities. Professional organizations are prevalent and have been identified as possible sources of external visibility, competence acquisition, mentors and role models who are associated with women's career advancement. Anecdotal information suggests that women's professional organizations provide unique developmental opportunities (Avery, 2008). Professional organizations enabled women to better evaluate where they were career wise in order to get emotional support, to balance isolation of work and to find mentors and sponsorship.

Professional organizations have been found as a common factor in the career histories of women in management and leadership positions to the extent that professional organizations are a

reflection on the profession and gender issues (Cassirer & Reskin, 2000). The key to meeting the career development of women employees is to integrate recruitment placement and development efforts Mentoring, when it does happen, is one way to break down the barriers that women face, but it is not such a simple matter (Grant, 2012).

Networking is the other way of overcoming barriers. Networks provide a widening circle of personal and professional references that can assist in the promotion of women as candidates for positions. Networks can provide information through newsletters or word of mouth on systems that have job openings and contacts, offer advice on benefits of positions, salary, history and background of school boards (Helfat, Harris & Wolfson, 2006). Women need to actively seek out networks with men and other women to gain visibility, information, advice and receive moral support as they pursue their careers (Searby & Tripses, 2006).

Gender Stereotypes

Bradley and Healy (2008), posit that in most countries, women are perceived to have 'primary' responsibilities as wives and mothers. However, in many cases, either as a result of a preference for personal development, or out of sheer economic necessity, women also go out to work in the employment market. Juggling these different occupations and their consequent responsibilities is no easy task for women. According to Grant and Simmons (2008), a direct impediment for females in attaining administrative positions is the reality based factor of family responsibility. It was frequently observed that extensive family responsibilities especially those involving marriage, childcare and household activities can affect females' career achievements (Kamau, 2004).

The traditional expectations of women's major roles in life are those of wife, mother and homemakers. Women workers still tend more than men to bear the main burden of family

responsibilities as well as paid and unpaid work; these double work burdens hampers their upward movement to management positions (Moreau, Osdood & Hals, 2007). Women's career motivation tends to have declined in relation to their experience, as the salience of family issues becomes more significant, and as they realise the inherent difficulties of combining work and family life.

As such, they are not likely to remain in site-based roles and reach high profile project management positions (Dainty et al., 2000).

Today, it is generally believed that marriage constitute an advantage for men who want to make career, but a real handicapped for women who have the same ambitions. Not only does marriage provide with logistic support /housework and emotional security/but also a grantee of stability and reliability in the eyes of contrast, women, once married and, especially with a considerably increase their domestic burden and multiply the obstacles to buildings career (Mohamed, 2005). In relation to this family role, involvement can have a negative impact on achievement even when the women themselves may not choose to their career involvement based on long held stereotypes often assume that married women especially those with n will and should play a primary care taker role within their families (Bagilhole, 2014).

Mohamed (2005), argued that home and family responsibilities posse obstacles on women aspiration in administration in two possible ways. First, the woman not only must effectively juggle all of her tasks but she must also contend with the bulk of male educational executives who erroneously believe that not only she is unable to manage the balancing act but that it is in appropriate for her to attempt it. Second, the impact of home making roles is especially difficult for women's' progress in the administrative areas. In light of this females suffer from sever time since they are caring double burden of domestic and bread wining responsibilities (Mohamed, 2005).

Family and home responsibilities, place bound circumstances, moves with spouses, or misalignment of personal and organizational goals were early contributors to women's lack of administrative success, either because the demands of family on women aspirants restricted them or because those who hired believed that women would be hindered by family commitments (Moreau, Osdood & Hals, 2007).

Powell (2000), stated that societal expectations of women are greater interims-of family responsibilities; such as care for elderly of children, and husband are exclusively that of she has to participate fully in funeral/mourning 'e no one raises eyebrows if a male/ who is also a manager just stays an hour and leaves the mourning house or does not attend a funeral because of "meetings". They also note that, it is in the family realm that women pay the highest price.

Furthermore, multiple roles of women in the family, society, (traditional norms) and in the work place posse on a double or multiple burden which hinders their career progress and advancement to managerial positions (Sadeghifar, 2003). She also realizes that if the mother is a manager beside her managerial tasks she will be required to take care of her children, like taking them to hospital when they are ill, going market to purchase goods for them and staying at home when the caregiver leaves in order to satisfy families need. Accordingly, many woman managers no longer want to have to choose between career and family aspirations, the unequal sharing of family responsibilities continued to determine their carrier advancement (Clarke & Wall, 2014).

Rehman and Ogunlana (2009), indicated that the extent of women subordinate career aspiration depends up on women's own values, systems and priorities, the degree of support provided by their husbands, the age based needs of their children, and the availability of organizational support in the form of flexible work schedules and assistance for children-care. Wife-hood and motherhood

computed for resource (time and energy), which must be allocated between both the occupational and domestic roles. These multiple demands, thus inhabited the single mindedness continuous participation and commitment required for managerial success (Virginia, 2007).

Empirical Review

Tharenou (2005), emphasized the importance of individual factors (e.g. education, work experiences, personality) person-environment factors (e.g. support and encouragement) and organizational factors (e.g. organizational level) in women's progression. Nelson and Burke (2000), focused on work stress and health among managerial and professional women. In addition, the role of work-personal life assimilation in the lives of women received increasing attention. Each of these broad areas is incorporated into the present study.

Influence of historical social cultural perspectives

According to Tai et al. (2005), there are nine customary barriers hinder women from participating in male dominated careers: Women-Not-Good-Enough Ideology; glass ceiling perspective; negative Stereotypical Assumptions; low levels of aspiration; Formal and Informal network forged by men; Attributions for Successful work performance; Training and Development Opportunities; Leadership behaviour; and impact of organizational systems, those within an organization who believe that females are not as productive as the male.

Such organizations and societies tend to differentiate or diminish the achievements of women. A study by Hannagan (2005) revealed that this was because in many societies, top management activity has been seen as the prerogative of men. In these economies, more specifically patriarchal societies, there are structures regulating the roles of women. A number of these structures have aided the collective programming of the societal mind,

making the under representation of women in management positions acceptable

Mbogori, (2014) in his study on factors influencing the level of women participation, in community development projects in Narok south district, Kenya noted that women pastoralist today is more vulnerable than they were in the past and are unable to directly voice their concerns to those who make decisions over their lives. Women and girls are regarded as the custodians of cultural values and beliefs more than men and boys. Some women view this as a source of authority, but culture is not only defined by men, it is also imposed by them. Women and girls become much more susceptible to gender discrimination (Bella, 2006). Their health and social status is affected as well as their ability to participate fully in their community development. Limited access to health care education, high mobility rates, low life expectancies and lack of knowledge about family planning and reproductive health all indicate that women pastoralists continue to be disproportionately excluded from the public services, which are already extremely limited. (Kipuri and Ridgewell 2003).

Axelsson, 2010 noted that Social norms enforced by male and female community elders continue to be observed irrespective of the growing body of legislation enacted to protect and promote women's rights.

Among pastoralists in Eastern Africa, girls are socialized early to accept their role as helpers to their mothers, who are subordinate to their husbands. As the girls grow older and enter marriage, they too occupy the same position as their mothers in a household that her husband heads (Weil, 2005). Girls are cast as the weaker sex and are taught to obey, respect and submit to the leadership of men, while young men gain prestige for trekking livestock to distant camps and protecting the community.

Among the Maasai of Kenya and Tanzania, girls respond to greetings from men with shrill voices as a sign of deference to the caller and continue

to do this until they enter adulthood. "Maasai women and girls are expected to have two voices, one for the normal talk and another little voice used to demonstrate respect for men. Boys and men are not required to change their voices at any time", Clementia Mateyain, a Tanzanian woman explains (Kipuri and Ridgewell 2003).

Influence of Organizational Barriers

According to Ryan, (2007) in his study on Gender Mainstreaming and Project Empowerment, he noted that the women are enabled to gain equal social and economic projects from the same resources, which means that a change in institutional and organizational rules is necessary. The implementation history of many organizational policies has always been dependent upon the institutional location of these policy efforts and the political strength and legitimacy of women's movements. It must be remembered that the empowerment approach to women's project development interests emerged out of criticism from women in developing nations, concerned with the respect of women's interests and identities in an unequal global economic order (Goetz 1997).

Miles, (2007) in his study on Project Development and Gender Equality: Consequences, Causes, Challenges and Cures the family is the women's arena, when reviewing development organizations and their institutional environments in a gender perspective, found out that other institutions like organization are usually seen as gender-neutral territory. A conceptual distinction between institutions and organizations has to be made; the economist Douglas North has defined institutions as frameworks for socially constructed rules and norms, the functions of which are to limit choices. They reduce uncertainty, provide structure for everyday life, make certain forms of behavior predictable or routine and they internationalize them. Gender projects that imply a sensitive institutional change have to establish gender equitable forms of social interaction and

challenge the legitimacy of forms of social organizations that discriminate women.

All institutions embody a history of social choices by particular groups; an analysis shows how these choices are made by the social patterns to preserve the power of particular groups, rather than with equity or efficiency. Understanding institutions as historically constructed frameworks for behavioral rules and as generators of experience contributes to understanding why when new agents (such as women) or policies (such as gender equity) are introduced into institutions, the outcomes in a gender perspective can seem to have changed so little (Guiso et al,2002)

Thus, the reason behind unequal job opportunities for women in the management positions lies in the numerous barriers, which hinders the women from taking these positions. These barriers include lack of sense of competition among women for these positions, lack of seeking excellence in the workplace, gender roles, gender beliefs, stereotypes beliefs about male power (men superiority) and the organizational structure. These barriers led to the fact that the women do not have an equal share of management positions as the one for the men in society.

Influence of Training and Development

According to Abraham and Altman (2005), several programs need to be designed in such a way to attract and retain women in any organisation. This means that there needs to be "a comprehensive, rather than a piecemeal, approach to institutional transformation is crucial to mentoring and supporting women and minorities at all stages of academic careers". They argued that distinctive platforms to enhance gender equity must be supplemented by an overhaul of educational and personnel program and a genuine guarantee to achieving gender equity at all levels.

According to Robbins and Judge (2007), in his on the effect of training and development on employee performance noted that competent employees do not remain competent forever.

Skills deteriorate and become obsolete and therefore new skills need to be learned. They cite a report from the USA where corporations with 100 or more employees spent more than \$51 billion dollar on formal training in one year. Most training is directed at upgrading and improving an employee's technical skills.

Thompson (2002) quotes from a survey carried out in the UK in 1996 which showed that the women employee of today in project construction values training and development opportunities over pay and perks.

According to her the survey further showed that seventy-three percent (73%) of those survey said they would stay with an organization that invested time and energy in their development rather than move to a rival organization that paid more money but less investment in helping them to progress. Furthermore, since the mid – 1980s, it has been widely recognized that the training and development of staff should be a major item on any organization's agenda.

This means that every manager or supervisor must have responsibility for his own self development and then the development of the employees and his project manages. Therefore, the manager must make efforts to identify, define and assess the competitiveness of individual employee's skills and make a way for these individuals to develop the skills required. However, for a supervisor to be able to assess the competitiveness of the competencies of employees and thus set objectives for the necessary improvement of these competencies through training and development, he must first set up some kind of an employee appraisal system. A manager has accountability for the performance of his employees and therefore a manager's success would be dependent on the abilities of the employees. A better or very well trained employee should increase efficiency and even productivity by reducing fatigue and wastage (Thompson, 2002)

Impact of Gender Stereotypes

Henderson, Stackman and Koh (2013), explored women project managers as a group in order to generate new understanding about the present project context within which they work. The study explored their demographics and project characteristics, their project challenges and issue selling moves, and their perspectives on the advantages and disadvantages for women in this profession.

The research results established significant associations among women project managers' career, age, cost of their projects, and their professional certifications. In addition, their challenges and issue-selling moves produce six factors related to their influence of others. Lastly, the results reveal women's self-described advantages and disadvantages in the project management profession showing that while women project managers do continue to experience marginalization from gender bias, they are leveraging particular job challenges and issue selling circumstances to their advantage in moving through gender bias.

With respect to the behaviour and cultural school of thought, a range of studies have developed which seek to explain the problems faced by women at work. These studies include those that explain traditional gender roles. These stereotypes which are ascribed by society sometimes attribute some negative stereotypes to women, such as the fact that women are expected only to care for the home front. This in turn can lead to women not being able to maintain a career; women are expected to be submissive, not ambitious and striving to rule, women get lower pay, operate flexible work hours, have less emotional stability, possess lesser strength, and lesser aggression when compared to men, who are perceived to be more aggressive and competitive. Kront (2006) discoursed that women tend to direct their occupation goals towards jobs that are in line with societal acuties of female roles and they do not aim for challenging jobs. Tlaiss and Hauser (2011) contended that women's countenance of

relatively low ambitions may not be disparate to the actual barricades to their progression.

Caroline and Annalisa (2005) have reviewed gender stereotyping policies in international development institutions. The 1995 Beijing PfA prioritized gender mainstreaming as a tool in achieving gender equality; Moser and Moser studied whether or not any progress has been made ten years later. Three stages were used to categories this progress: the adoption of terminology, the putting in place of a policy and its implementation in fourteen international development institutions and organizations, including bilateral donors, international financial institutions (IFI), United Nations agencies and NGOs.

RESEARCH METHODOLOGY

The study used a descriptive design in the collection of data on the determinants of women's participation in project management in Kenya. This design was preferred because a descriptive study ensures complete description of the situation, making sure that there is minimum bias in the collection and interpretation of data (Cooper & Schindler, 2008). The purpose of multiple regressions was to establish the existence of a relationship between the dependent variable (women's participation in project management) and the independent variables (socio-cultural inhibitions, organisational complexities, and education and gender roles)A general linear model is used for multiple regression models. The general lineal model has the following structure (Ott, 2001):

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Y = Women's Participation in Project Management

α = constant (Coefficient of Intercept)

β_1 - β_4 = Regression Coefficient of four variables

X_1 = Socio-Cultural Inhibitions

X_2 = Organisational Complexities

X_3 = Women Education

X_4 = Gender Roles

ϵ = error term

Presentation of quantitative data was in form of tables, pie-charts and bar graphs only where it provides successful interpretation of the findings, while qualitative data were presented in form of explanatory notes.

RESEARCH FINDINGS AND DISCUSSIONS

Study Variables

The study sought to establish the effect of socio-cultural perspective, organizational barriers, training and development and gender stereotype on women participation in construction projects. The range was 'strongly disagree' (1) to 'strongly agree' (5). The scores of disagreeing have been taken to represent a variable which had a mean score of 0 to 2.4 on the continuous Likert scale ;($0 \leq S.D < 2.4$). The scores of 'Neutral' have been taken to represent a variable with a mean score of 2.5 to 3.4 on the continuous Likert scale: ($2.5 \leq M.E < 3.4$) and the score of both agree and strongly agree have been taken to represent a variable which had a mean score of 3.5 to 5.0 on a continuous Likert scale; ($3.5 \leq S.A. < 5.0$). A standard deviation of > 0.9 implies a significant difference on the impact of the variable among respondents.

Socio-Cultural Perspectives

The findings in Table 1 above indicated that most respondent acknowledge to a great extent that women did not participate in construction projects because of the gender disadvantages in the industry (mean of 4.231), women have negative experiences while implementing construction projects because of their gender (mean of 4.205), and that despite all these, the attitude towards women in construction projects had changed (mean of 3.821). The respondents also agreed to a moderate extent that women achieve work life balance while in the construction projects (mean of 3.818), there is gender disparity in salary and pay in the construction industry (mean of 3.746), unattractive clothing (mean of 3.744), and lack of

career information at school with a mean of 3.667.

Table 1: Socio-Cultural Perspectives

| Indicators | Mean | Std. Deviation |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------|
| Disadvantages in construction projects based on gender | 4.231 | .777 |
| Gender negative experiences while implementing construction projects | 4.205 | .801 |
| Attitude regarding women in construction projects have changed. | 3.821 | .796 |
| Women achieve work life balance despite family Commitments in construction projects: (having children affecting promotion, achieving a good work life balance) | 3.818 | .656 |
| Gender bias with regards to salary and pay | 3.746 | .880 |
| Unattractive clothing: (personal protection equipment, hard hats, steel capped boots) | 3.744 | .966 |
| Lack of career information at school age due to socio cultural perspectives | 3.667 | .898 |

Source: (SPSS Output, 2016)

The findings of this study were found to be in concurrence with the results of other previous researches. The findings were similar to Jimoh *et al* (2016) who found out that socio cultural perceptions had an eighth factor ranking while familial obligations were ranked third. According to Amaratunga et al. (2005) male beliefs are norm within the construction industry. These include long working hours, rivalry among staff, and autonomy. Bagilhole (2003) found that the most prevalent problem in the construction industry for women is sexual harassment.

Organizational Barriers

This section of the questionnaire sought to get from the respondents whether organizational

barriers influence women’s participation in construction project. As evident from Table 2, the respondents agreed strongly that women in construction projects are given different tasks compared to their male counterparts based on their gender (mean 4.103), while recruitment practices are seconded by a mean of 4.077. However, different career opportunities, different treatments at the work place, bias in recognition and disparity in pay and salary were found to be moderate in determining women participation in construction projects. Lack of flexible working hours was on the other hand found to have a low mean of 2.659.

Table 2: Organizational Barriers

| Indicators | Mean | Std. Deviation |
|-----------------------------------------------------------------------------------------------------------------------------------|-------|----------------|
| Gender disparity in job allocation | 4.103 | .718 |
| Recruitment Practices: (not getting the same opportunities due to gender) | 4.077 | .774 |
| Different career opportunities to both men and women in construction projects | 3.827 | .615 |
| Different treatments between men and women while implementing construction projects | 3.692 | .950 |
| Bias in recognition based on gender | 3.564 | .754 |
| Disparity in pay and salary | 3.513 | .885 |
| Lack of provision with the right equipment (with the right size) to carry out their roles when implementing construction projects | 3.488 | .942 |
| Lack of flexible Working Hours | 2.659 | .469 |

Source: (SPSS Output, 2016)

These results tally with other researches done previously. According to Bagilhole et al., (2000), the construction workplace had been described as amongst the most prejudiced in the world, with an exceedingly macho culture which was antagonistic and biased towards women. This results in gender discriminated career prospects which had an inexorable consequence of high staff turnover of women in construction establishments (Davidson and Cooper, 1992; Brett and Stroh, 1994). Dainty et al., (2000) found that younger women became disheartened with their career choice more quickly than men, and sought to leave the industry early on in their careers. Nevertheless, confronted with this organisational barrier, some females still seem able to advance a higher degree of career gratification and confidence than their male colleagues, as they continue to enter previous male roles (Nicholson

and West, 1988). Hence, the male dominated culture can be especially negative for women entry, career progress and retention in the construction industry.

Training and Development

The data analysis shown in table 3 below sought to ascertain whether training and development influenced women participation in the construction projects. The data showed that the lack of female role models and mentors, and the disparity in equality and diversity training were one of the strongest factors determining women's participation in the construction industry, with means of 4.154 and 3.949 respectively. Career information and promotion of construction industry at a young age was the least factor determined by women seeking participation in the construction industry, with a mean of 2.500

Table 3: Training and Development

| Indicators | Mean | Std. Deviation |
|-----------------------------------------------------------------------------------------|-------|----------------|
| Lack of female role models and mentors | 4.154 | .812 |
| Disparity in Equality and Diversity Training: (aimed at Employers and Employees) | 3.949 | .759 |
| Increased Media coverage highlighting the issues in construction projects for women | 3.846 | .812 |
| Lack of knowledge over opportunities available in the construction industry | 3.821 | .790 |
| Fair placement and work experience opportunities available | 3.717 | .887 |
| Marketing and promotion of women already in construction | 3.641 | .668 |
| More career information and promotion of the construction industry begin at a young age | 2.500 | 1.419 |

Source: (SPSS Output, 2016)

The results of the influence of training and development was consistent with the results of Dainty et al (2000), who postulated that when a clear pathway for career prospects and opportunities was provided, regardless of gender, women are more predisposed to remaining within the construction industry. Aulin and Jingmond (2011), in their study indicated that the Swedish Construction Federation's proposal allowing a flexible work program and work hours is a positive way of inspiring female participation in

construction. Networking and mentoring structures are also considered ways of retaining female employees' in construction. This type of peer support or mentor-protégé relationship is alleged to be significant in drawing and retaining women in construction (Wangle 2009; Aulin and Jingmond 2011).

Gender Stereotype

The results of the data analysis on table 4 below shows that respondents agreed to a great extent

that construction projects are a male dominated culture, and that sexist attitudes towards Women in Construction Projects: (Jokes, comments) were some of the reasons women did not participate in such projects, with a mean of 3.744 and 3.615

respectively. The respondents also agreed moderately that women in construction projects work as administrators (mean of 3.434), and women feel isolated working in a predominantly male industry (mean of 3.539).

Table 4: Gender Stereotypes

| Indicators | Mean | Std. Deviation |
|----------------------------------------------------------------------------|-------|----------------|
| Construction Projects are a Male Dominated Culture | 3.744 | .849 |
| Sexist Attitudes towards Women in Construction Projects: (Jokes, comments) | 3.615 | .847 |
| Women feel isolated working in a predominantly male industry | 3.539 | .962 |
| Women in construction projects work as administrators | 3.434 | .912 |

Source: (SPSS Output, 2016)

The results are in concurrence with those of Jimoh et al (2016) who posited that the construction industry is mostly dominated by men, with women facing a lot of barriers ranging from lack of self-assurance to compete with their male colleagues, uncompromising and harsh working conditions, limited number of women achieving senior positions in a construction firm and lesser proportion of women training in construction-related fields to imbalanced job opportunities for women.

Dainty et al. (2000) stated that in order to survive in the male-dominated construction industry, females have three choices: (1) act like men, or (2) lower their objectives and accept minor positions, or (3) yield and move to work somewhere else. They found that it is really difficult for women to reach management positions in their establishments for two key reasons: (1) men's deliberate social segregation, and (2) men's downplaying of women's contributions in order to preserve their places in the male-dominated construction industry (Dainty et al., 2000)

According to Chun et al., (2009), negative perception of women capabilities in the construction industry greatly discouraged women from either entering this space, or affected the retention rate. Loosemore and Waters, (2004) stipulated that a high degree of stress on the job, being frequently asked to do trivial tasks, lack of inspiration from superiors, being unrecognised and undervalued and a low prospective of career advancement were some of the determinants of women participation in the construction industry.

Inferential Statistics

Inferential statistics were used to establish the relationship between the variables of the study and consisted of Correlation and Regression analysis

Correlation Analysis

The study on table 5 below sought to establish relationship between the determinants of women's participation in construction project.

Table 5: Pearson's Correlation Coefficients

| | | WPCP | SC-P | OB | T&D | GS |
|------|---------------------|------|------|--------|-------|--------|
| WPCP | Pearson Correlation | 1 | .597 | .018** | .598* | .588** |
| | Sig. (2-tailed) | | .001 | .016 | .014 | .024 |
| | N | 82 | 82 | 82 | 82 | 82 |
| SCP | Pearson Correlation | .597 | 1 | .016 | .005 | .103 |

| | | | | | | |
|-----|---------------------|--------|------|--------|--------|------|
| | Sig. (2-tailed) | .001 | | .898 | .965 | .406 |
| | N | 82 | 82 | 82 | 82 | 82 |
| OB | Pearson Correlation | .018** | .016 | 1 | .746** | .021 |
| | Sig. (2-tailed) | .016 | .898 | | .000 | .863 |
| | N | 82 | 82 | 82 | 82 | 82 |
| T&D | Pearson Correlation | .598* | .005 | .746** | 1 | .052 |
| | Sig. (2-tailed) | .014 | .965 | .000 | | .676 |
| | N | 82 | 82 | 82 | 82 | 82 |
| GS | Pearson Correlation | .588** | .103 | .021 | .052 | 1 |
| | Sig. (2-tailed) | .024 | .406 | .863 | .676 | |
| | N | 82 | 82 | 82 | 82 | 82 |

Source: (SPSS Output, 2016)

.897

From the finding in the table above, the study found that there was positive correlation coefficient between women participation in construction projects and socio-cultural perspective as shown by correlation factor of 0.597, this relationship was found to be statistically significant as the significant value was 0.001 which is less than 0.05. The study found weak positive correlation between women participation in construction projects and organisational barriers as shown by correlation coefficient of 0.018, the significant value was 0.016 which is less than 0.05. Further, the study found positive correlation between women participation in construction projects and Training and Development as shown by correlation coefficient of 0.598 and had a significant value of 0.014 which is less than 0.05. The correlation between women participation in construction projects and Gender stereotypes was positive as shown by correlation factor of 0.588; this relationship was found to be statistically significant as the significant value was 0.024 which is less than 0.05.

Regression Analysis

The study on table 6 below sought to test the goodness –of fit of the linear regression model in

testing the relationship between women’s participation in construction project (dependent variable) and socio-cultural perspective, organizational barriers, training & development and women education and gender stereotypes (independent variables) using goodness –of fit statistics of coefficient of determination (r^2) and adjusted coefficient of determination (adjusted r^2). The study used coefficient of determination (r^2) for multiple regression to measure the proportion of the variation in the dependent variable that would be explained by variations in the independent variables. It also used adjusted coefficient of determination (adjusted r^2) to measure the proportion of the variance in the dependent variable that would be explained by variations in the independent variables.

Model Summary

Results from table 6 indicated Coefficient of determination R2 value of .874, This implies that Y; Women participation in construction projects is collectively influenced by X1; Socio Cultural Perspectives, X2; Organisational Barriers, X3; Training and Development and X4; Gender stereotypes at 87.4 % at 0.05 level of significance. This therefore means that majority agree the independent variables are critical factors to women participation in construction projects.

Table 6: Model summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|-------------------|-------------------|----------------------------|
| 1 | | .935 ^a | .874 | .778 |
| | | | | 2.942 |

Dependent Variable: Women's Participation in Construction Projects

Analysis of Variance (ANOVA)

Table 7 presented the results of ANOVA test which revealed that all the independent variables notably; (X1) Socio Cultural Perspectives, (X2) Organisational Barriers, (X3) Training and Development and (X4) Gender Stereotypes have a significance influence on Women participation in construction projects. Since the P value is actual

0.02 which is less than 5% level of significance. Table 7 also indicated that the high value of F (79.086) with significant level of 0.00 is large enough to conclude that all the independent variables significantly influence women participation in construction projects. The study used ANOVA F test to determine whether $\beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$.

Table 7: ANOVA

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 2280.980 | 17 | 78.654 | 79.086 | .002 ^b |
| | Residual | 328.961 | 64 | 8.657 | | |
| | Total | 2609.941 | 81 | | | |

Dependent Variable: Women's Participation in Construction Projects

Beta Coefficients

Table 8 presented the results of the test of beta coefficients which indicates that the significant relationship between independent variables notably; (X1) Socio Cultural Perspectives, (X2) Organisational Barriers, (X3) Training and Development and (X4) Gender Stereotypes and dependent variable Y = Women participation in Construction projects.

(X3) Training and Development coefficient of 0.810 was found to be positive at significant level of 0.0019 and this indicates that Training and Development has a positive influence on Women participation in Construction projects. (X4) Gender Stereotypes coefficient of 0.741 was found to be positive at significant level of 0.001 and this indicates that Gender Stereotypes has a positive influence on women participation in Construction projects. This clearly demonstrates that all the independent variables significantly influenced women participation in Construction projects.

As presented in table 8, (X1) Socio Cultural Perspectives coefficient of 0.865 was found to be positive at significant level of 0.0012 and this indicates that Socio Cultural Perspectives has a positive influence on Women participation in Construction projects. (X2) Organisational Barriers coefficient of 0.868 was found to be positive at significant level of 0.0022 and this indicates that Organisational Barriers has a positive influence on Women participation in Construction projects.,

However, since the significance values were less than 0.005, all the coefficients were significant and thus the regression model was fit;

$$Y = 243 + .868X_4 + .865X_2 + .810X_3 + .741X_1 + .233$$

From Table 8, the t values of 1.703, 1.060, 1.335 and 1.723 is statistically significant. Kothari (2014) notes that the closer T is to 0, the more likely there isn't a significant difference.

Table 8: Regression Coefficients

| Model | Unstandardized Coefficients | | | t | Sig. |
|----------------------------|-----------------------------|------------|------|-------|-------|
| | B | Std. Error | Beta | | |
| (Constant) | .243 | .233 | | 1.546 | .0001 |
| Socio-Cultural Perspective | .865 | .508 | .156 | 1.703 | .0012 |

| | | | | | |
|-------------------------|------|------|------|-------|-------|
| Organizational Barriers | .868 | .819 | .130 | 1.060 | .0022 |
| Training & Development | .810 | .607 | .130 | 1.335 | .0019 |
| Genders Stereotypes | .741 | .430 | .140 | 1.723 | .0009 |

a. Dependent Variable: Women Participation in Construction Projects

CONCLUSIONS AND RECOMMENDATIONS

The study established that in the society women are viewed as less equal to men affecting their engagement in male dominated spaces; certain tasks are deemed suitable for men and hence this affects women participation in such careers. It further revealed that women's access to male dominated projects has been hindered by sex-role stereotyping and occupational sex-typing, and is further limited by social expectations, parental guidance and self- aspiration and that women are socialized to nurture and support others as they assume the traditional role of mother and caretaker of the home.

The study also found that women have typically been perceived as being weak, and generally not robust enough for the intensely difficult task of management, besides patriarchal ideology and mobilization of bias has effectively hampered women's mobility to management positions as it denies women management credentials and places them in lower ranking positions in projects. The study also revealed that women carry out almost all the reproductive roles of the households as well as the productive roles which do not add value to their professional experience women and those who do not perform domestic roles are viewed as deviants making it difficult for them to assert themselves when seeking managerial positions in projects

The study found out that the negative stereotypes of women in organization are common and this has become a major barrier to their involvement in construction projects and that women are perceived to be unable to manage, supervise, criticize constructively, manage finances, and function in a political frame within the construction project. The study also established that organizational structures especially job assignment are designed to prevent females from

participating in on site roles in construction projects and hence; confine them to work roles that are considered to be females' occupation. The results also show that project-based organizations culture is inherently masculine fostered through language and behaviour; recruitment and hiring practices which often result in women being placed in jobs that have short or non-existent job ladders limiting their participation beyond low-paying jobs.

The study established that women do not have access to a large number of appropriate role models, and as a result, women may not even give posts in construction projects consideration, besides, women experience barriers to promotion due lack of access to the means of acquiring new skills. The results revealed jobs in which women are concentrated either lead nowhere or have very short lines of progression and that jobs employing the largest number of women are much less likely to be located on job ladders, while women's failure to aspire to the higher position might be a result of their experiences working with male colleagues, whose leadership behaviours may not be compatible with women's preferred ways of leading. The study found out women work in organizational contexts in which males use intimidation and silence to discourage their progression to managerial positions; have limited access to capable mentors and however women mentors are few

The study established that secondary position of women in patriarchal societies translates itself into view of education as being unimportant for girls; while the fear of girls being exposed to unacceptable peer practices in educational institutions prevents parents from allowing female children access to basic schooling. The study also revealed that women lack resources towards their education; have limited

opportunities to mentoring and networking in the construction industry; and lack skills and professional development in the area hence reduced women's participation in the construction industry.

The study found out that women are perceived to have primary responsibilities as wives, mothers and homemakers and these extensive family responsibilities especially those involving marriage, childcare and household activities affect women's' career achievements. The study also established that women workers and executives bear the main burden of family responsibilities as well as paid and unpaid work and these double work burdens hamper their involvement in construction projects. Thus women's' career motivation in the construction industry tends to have declined in relation to their experience, due to the inherent difficulties of combining work and family life and that this unequal sharing of family responsibilities continues to determine their participation in this industry.

The study revealed that women also contend with the male executives who believe that not only are they unable to manage the balancing act but that it is inappropriate for women to attempt in involving themselves with work in the construction industry and that multiple roles of women in the family, society and in the work place pose a double or multiple burden which hinders their participation in construction projects. That women, once married experience considerable increase in their domestic burden and multiply the obstacles to buildings career.

Conclusion

In the society women are viewed as less equal to men affecting their mobility in construction projects; certain tasks are deemed suitable for men and hence this affects women's' involvement in construction projects. Political policy is insufficient to elicit change; monitored equal opportunity actions that target women are required; in particular, measures to support women such as role models and mentoring

programmes. Initiatives taken by a small but progressive company committed to favouring women through preferential employment and skills development were researched and conclusions were drawn that barriers must be dissembled and initiatives taken to achieve the entry of women into the construction industry workforce either as employees or as entrepreneurs.

The conclusions drawn from the research indicated that while women are subjected to the same barriers as women in international construction industries, there are positive indicators that changes are likely to occur. This is mainly because of the paradigm shift in societal values brought on by the move to county governments rule that have created a platform for change, all of which is strongly reinforced by the government's drive to include women in all aspects of economic activity.

Further implications are that this paper focuses on aspects which cause women not to enter the industry (barriers) or, having entered it, not to stay in it (retention). The implication of the research is that it is critical that the environment be made more accommodating to women, that women be appropriately placed and that the industry looks for measures to retain them.

Thus, the inclusion of women would make a positive impact on the industry and that employment of women in previously traditionally male areas is a requirement of current government legislation. Positive measures for women to work on site in construction are developing. Furthermore, where there is appropriate support at a macro level through legislation and at a micro level through company efforts to become more equitable, there is a change in male and female attitudes towards women working in the industry. Ultimately, women can feel confident and positive about working in this traditionally male field.

There needs to be a certain percentage of women in the industry for their presence to be a norm, not an exception. Women in construction have

said they do not want to be selected for different treatment and want to prove themselves alongside male colleagues. This is achievable by industry training a group together – not a few here and a few there – and by the development of role models (Wall, 2004).

It is clear that attitudes have changed with time, and younger men and women are more open to women in construction. Women in the study all felt that they had to work harder than men to prove themselves and faced negative attitudes and discrimination when it came to taking on traditionally male roles. However, women were also positive about the possibilities of overcoming discrimination and emphasised that by working hard and having a strong personality and a positive attitude it was possible to overcome gender barriers and be respected. In the study, recognition was given to the necessity of mediation or training and women in the study all emphasised mentoring and role models as highly important.

Recommendations

The study established that socio-cultural dimensions affect women's participation in construction in that the culture of the industry partially contributes to the physical environment and facilities provided on site. Changing culture is not easy and is unlikely to be a quick process. Mere change in the physical structural factors will not address all cultural problems, as culture includes, among other things, the way of talking and the way of behaving. However, by changing physical structural factors, the industry can become more receptive to women. This could be achieved by the following: Provide separate facilities for women on site, including toilets and changing rooms; Provide uniforms designed for women; men's clothing is often an inappropriate size and uncomfortable for women to wear; Monitor the attitudes and behaviours of co-workers towards female professionals; Allocate more than one woman for site based jobs,

because when women are not isolated they can make a change in the structural factors.

The conflict between work and family obligations, that many construction professionals experience, is more acute for women than for men. While men and women both need to balance the demands of work and home life, women still bear the primary responsibility for domestic duties in most households (Higgins et al, 2000). Site-based employees, both professional and manual workers, are usually subject to changing work locations. This can involve travelling substantial distances and/ or long periods away from home, a situation which can present serious difficulties in terms of transport and child-care. In a study 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.

The study found that organizational barriers influence women's participation in construction projects. Hence there is need for the identification of problems of sexual harassment in worksites and taking of appropriate remedial action. This could be done through a memorandum of understanding in the organisation. Furthermore, construction companies should include sexual harassment prevention training in the Safety and Health Program, and should encourage the formation of labour unions in the industry to address issues pertaining to gender inequity. All communication materials should be gender neutral and include women. Visual materials (videos, posters, pictures, etc.) should include examples of female construction workers to promote an integrated construction workplace. To address the problem of workplace isolation of female construction workers, employers, apprenticeship programs, and unions (where

responsible) should assign female workers in pairs, or more when possible, especially those who are relatively new to the construction trade. Employers, unions, and apprenticeship programs should ensure that their supervisory personnel, teachers, and representatives have training and guidelines in ensuring the safety and health and equitable treatment of female workers, members, or trainees. This would include knowledge of the issues raised in this study, sexual harassment prevention, and leadership training.

The study found out that training and development affect women's participation in construction projects and that it is not uncommon for women to receive less training and development. According to an OSHA study, it was recommended that the OSHA Training Institute curricula and/or other OSHA-sponsored training should include gender-related safety and health issues, i.e., PPE fit, sanitary facilities, workplace culture, and reproductive hazards, whenever programs are provided to the public and to governments and state OSHA compliance safety and health officers. There should continue to enforce current on-the-job safety training and employers and unions should make skills training courses available and encourage female workers to take advantage of them. The courses should provide female workers with more opportunities to diversify their skills and minimize their chances of doing tasks incorrectly or in an unsafe manner. The study established that gender stereotypes influence women's participation in construction projects, as the industry is largely considered male dominated. It is important therefore to understand the difference between the 'negative image of the industry' and an 'incorrect perception of the industry'. The negative image is an industry-wide problem, irrespective of whether they are men or women. For instance, the construction industry is typically portrayed as offering low pay, promoting adversarial business

relationships and poor working practices, environmental insensitivity, and a reputation for under performance. Solving some of these problems will take a long time and require significant change. However, an 'incorrect picture of the industry' can be resolved by educating people and women in particular. A poor initial understanding of the culture of the industry will make women uncomfortable once they start a career in construction. It is therefore vital that an accurate picture is portrayed, including positive and negative characteristics. This could be achieved by: organising image campaigns where we can educate young women about professional roles and on the career opportunities available for them in construction. Merely implementing a positive image campaign without revealing the real picture may attract more women into construction but is unlikely to retain them in the industry; Inviting construction women role models to schools and let them share their experiences with female students; Organising workshops for women on how to work successfully in a male dominated industry with examples and practical solutions.

Recommendations for Further Research

The research sought to investigate the factors affecting participation of women in construction projects with focus on the Judicial Performance Improvement Project (JPIP). The study focused on the effect of socio-cultural perspectives, organizational barriers, training and development, and gender stereotypes on women participation in construction projects. However, there could be other factors that influence women participation in construction projects, besides the study only focused on one project - Judicial Performance Improvement Project (JPIP). Hence there is need for further research of other factors not covered by the study using a bigger sample.

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