**RETAINING AND ATTRACTING FEMALE CONSTRUCTION GRADUATES INTO THE TEACHING PROFESSION**

1Owolabi James Dele Building Technology Department, Covenant University.Ogun State.Nigeria.

2Sunmola Omobosola Fausat. Building Technology Department,CovenantUniversity. Ota.OgunState.Nigeria.

3Amusan Lekan. Building Technology Department, Covenant University.Ogun State.Nigeria.

Correspondence Author: lekan.amusan@covenantuniversity.edu.ng

ABSTRACT

The construction business is largely male-dominated, making equal chances for women a significant problem. While women are increasingly entering the workforce, the academic sector appears to be lacking. Studies show that in the construction academic sector, academia profession is still male dominated. This paper is aimed at identifying strategies for attracting and retaining female construction students into the teaching profession. The purpose of this research is to gain a better insight into what discour­ages young adults, in particular young women, from entering the teaching pro­fession. The responses were analyzed using Statistical Package for Social Science (SPSS) version 26. Linear regression was used to determine the impact of risk on project objectives. Relative Importance Index (RII) was also used in the ranking of risk factors that affects project cost, schedule, quality and scope objectives. The research findings revealed that the number of female students who want to be retained as lecturers is very low his electronic document is a “live” template and already defines the components of your paper [title, text, heads, etc.] in its style sheet. No numbering required for Abstract.

Keywords—Training, Construction, Attraction

` I. INTRODUCTION

The building industry is widely regarded as one of the most important contributions to a country's economic prosperity[1]. With an estimated 111 million construction workers globally, the industry is usually regarded as the world's largest industrial employer of labor [2]. However, due to substantial gender segregation, the construction business today employs women in a traditional manner. Many research have been conducted to determine why female workers avoid the construction industry in general and the craft sector in particular [1];[2] and [3]. Social acceptance of employment, sexually unsuitable occupations, sexual discrimination, sexual harassment, physical incapacity, being unqualified for blue-collar jobs, and working conditions such as harsh weather, unsociable work hours, and exposure to risks are all typical impediments. Women are underrepresented in all construction occupations and professions, despite the belief that they may be relied on to bridge the skill gap and the aging population.

A compensated profession is one that requires extensive training but does not require a formal qualification. Teaching is one of the world's oldest professions, but it is also one of the most contentious, with debates raging over the required credentials for membership, the role and activities of members, and the terms and conditions of service for those who practice it. Teachers, on the other hand, have long been recognized as facilitators and motivators in the teaching/learning process. Teaching is the specialized use of information, skills, and traits to give one-of-a-kind services to suit the individual and societal educational needs. Future entrants have been known to use tertiary colleges as entry points into any industry of their choice. Despite this, statistics show that female enrollment in construction-related programs is abysmally low. Women are underrepresented in higher education institutions and universities around the world, particularly in positions of authority and influence.[2];[3]..

The construction business is largely male-dominated, making equal chances for women a significant problem. While women are increasingly entering the workforce, the academic sector appears to be lacking ( construction industry training board [3]. The presence of a substantial proportion of female teachers, particularly in tertiary institutions, is a long-standing trend that can be found in many countries' educational systems. A rise in the number of female teachers is frequently linked to education systems that have achieved or are close to achieving universal basic education. Those countries, on the other hand, that continue to aim towards Education for All (EFA) are more usually connected with a shortage of female instructors [3]. This scenario may not be dissimilar to that of Nigeria, where enrolment and the number of female professors in construction programs remain murky and the subject of ongoing debate. Despite numerous studies and research attempting to address women's engagement in the construction business, there is a gap in women's participation in construction academia. As a result, the goal of this research is to assess techniques for attracting and retaining female construction graduates in the teaching profession.The purpose of this research is to examine the strategies that attract and retain female construction graduates into the teaching profession with a view of increasing women participation in the construction industry. The objectives of this study are to: Examine the factors inhibiting female construction graduates from entering the teaching profession; Evaluate the challenges experienced by female lecturers in construction academia; Evaluate the benefits accrued from increasing female construction graduates participation and Examine the strategies to retain female construction graduate into academia.

# II. REVIEW OF RELEVANT CONCEPTS

This study was designed to gain consensus among higher education female undergraduates and female faculty in construction fields (Building Technology, Civil Engineering, Estate Management, Mechanical Engineering and Architecture) about factors hindering them from entering academia roles as well as the factors they perceive as having contributed to their success and persistence in these male-dominated fields. In order to understand the participation of females as construction faculty, literature outlining the enrollment trends and persistence of women in construction was reviewed. An examination of personal, social, and academic factors that are determined by researchers to be influential in their persistence in construction majors and careers were also studied. Furthermore, some of the constraints faced by females in construction majors, as well as notable effects of the underrepresentation of females in construction individuals, departments, and the nation were noted. Finally, a review of some initiatives instituted or recommended to remedy the underrepresentation of females in select construction faculty was also conducted.

### Exposure To Female Role Models

Same-gender role models are helpful for women who are already in construction fields. Women who are in construction fields contend with negative stereotypes that cast doubt on their abilities to perform well in these fields [4] and[5]. The fear of confirming these negative stereotypes, known as stereotype threat [2], causes women who are personally identified with the domain to underperform [3], [5], [6] and [7].

III. METHODOLOGY

A. Sample Size

A sample, according to [8], is a subset of a population that includes selected items, individuals, or observations. It is a finite subset of a statistical population whose attributes are investigated in order to learn more about the entire population. This study used simple random sampling technique to select sample size. A sample size is described as a subject of the population. For this study a sample size of... Students and lecturers were selected from the study area. This figure represents an adequate representation of the characteristics of the population.

1. Data Instrument For The Study

Data collection tools are methods for collecting raw data from respondents [7]. As [7] rightly stated, data collection refers to the gathering of information, including where and how it was gathered. This study incorporated both primary and secondary data for its analysis. Primary data can be collected by questioning, weighing, conducting, or completing questionnaires, performing experiments, manipulating data, and explaining to perform a study [3] and [2].

This study due to the survey nature would utilize a standardized questionnaire based instrument to collect primary data in the form of replies from the respondents for this study. The questionnaire was administered to construction professionals about the subject of PPE comfortability as a safety measure on site, and the design of a web-based Wear-fit procurement system. This questionnaire was developed in line with the research questions, aim and objectives with the primary aim of gathering quality data. The questionnaire has three (5) sections titled section A, B, C, D and E. In section A, it recognised the background information of the female construction students and lecturers. Section B is to Examine the factors inhibiting female construction graduates from entering the teaching profession, section C is to Evaluate the challenges experienced by female lecturers in construction academia, Section D is to Evaluate the benefits accured from increasing female construction graduates participation and section E is to Examine the strategies to retain female construction graduate into academia.

Secondary data were obtained from past research projects, journal articles, magazines, newspapers, and literature on related topics.

1. Data Analysis Tool

The survey data was processed with the use of a statistical program called Statistical Package for Social Science (SPSS) version 21.SPSS’s Statistics program provides a plethora of basic statistical functions, some of which include frequencies, [cross-tabulation](https://www.alchemer.com/resources/blog/cross-tabulation/" \t "_blank), and bivariate statistics. It provides efficient data analysis and management of data in a graphical environment and graphical forms. It also allows survey managers to detect powerful insights into answers to open questions. The use of SPSS enables researchers to use their data with ease to construct a broad array of graphics, such as radial boxplots and density maps. SPSS also offers data management solutions that allow researchers to select cases, create derived data, and reshape files. The results were provided in form of frequency tables and visual charts, as well as data graded on a 5-point Likert scale while using relative importance index to provide a clearer image of the field survey results. The objectives were measured using mean scores, and the hypotheses were tested using inferential statistical tools such as analysis of variance (ANOVA) tests.

## **IV. DATA ANALYSIS AND PRESENTATION**

This study examined the influence of the COVID-19 pandemic on the materials, human resources, and completion time of construction projects in the state of Lagos. The findings revealed that The purpose of this study was to raise awareness of the potential influence of the COVID-19 pandemic on the construction industry by increasing sensitization.

A.Data Analysis And Discussion Of Findings

The data analysis of the dataset gathered in this study was shown in this part. The data analysis was done using SPSS v.26. This section looked at the background material, objectives, and hypotheses. The questionnaire distribution was able to collect 95 responses for students and 24 for lecturers from the survey which is used for the analysis. This chapter presents the findings of the research based on the data that was gathered. They were gathered from the responders to the instruments that were dispersed at random throughout the study (the survey questionnaire).To achieve a comprehensive and reliable study in descriptive statistics, the data was represented in tabular form, and analyzed using percentage distribution and mean supply index[8] and [9].

### **B.Background Information**

The study evaluated the characteristics of the respondents used in this survey. Table 1 presented the summary of the background information of the professionals surveyed. professionals from the industry were selected and their characteristics were presented in Table 4.1. According to table 4.1, Architecture students make up (21) 22.1 % of the respondents, Building Technology Students make up (17) 17.9% of the respondents, Estate Management Students make up (5) 5.3% of the respondents, Mechanical Engineering Students make up (18) 18.9% of the respondents, Civil Engineering Students make up (17) 17.9% of the respondents and Electrical Engineering Students make up (17) 17.9% of the respondents. Table 4.1 reveals that (9) 9.5 % of the respondents are 19 years of age, (19) 20.0% are 20 years of age, (36) 37.9 % are 21 years of age , (25) 26.3 % are 22 years of age, and (5) 5.3% are 23 years of age, and (1) 1.1% of the respondents are above 23. (21) 22.1% of the respondents are in 400 level and (74) 77.9% of the respondents are in 500level. To conclude this section of the study the respondents were asked if they would like to be retained as lecturers in their, (90) 94.74% responded No, while (5) 5.26% responded No. The background information supplied showed that most of the respondents do not want to be retained as lecturers in their respective departments[10]and [11].

|  |
| --- |
|  |

Table 1 **SUMMARY OF BACKGROUND INFORMATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Background Information** | **Frequency** | **Percent** | **Cumulative Percent** |
| **Gender** |  |  |  |
| Female | 95 | 100.0 | 100.0 |
| **Age of Respondent** |  |  |  |
| 19 yrs | 9 | 9.5 | 9.5 |
| 20 yrs | 19 | 20.0 | 29.5 |
| 21 yrs | 36 | 37.9 | 67.4 |
| 22 yrs | 25 | 26.3 | 93.7 |
| 23 yrs  Above 23 years | 5  1 | 5.3  1.1 | 98.9  100.0 |
| **Course of Study** | |  |  |
| Architecture | 21 | 22.1 | 22.1 |
| Building Technology | 17 | 17.9 | 40.0 |
| Estate Management  Mechanical Engineering | 5  18 | 5.3  18.9 | 45.3  64,2 |
| Civil Engineering | 17 | 17.9 | 82.1 |
| Electrical Engineering | 17 | 17.9 | 100.0 |
| **Would You Like To Be Retained As a Lecturer In Your Department** |  |  |  |
| Yes | 5 | 5.26 | 5.26 |
| No | 90 | 94.74 | 100.0 |
| **Level of Study** |  |  |  |
| 400 | 21 | 22.1 | 22.1 |
| 500 | 74 | 77.9 | 100.0 |

1. Reasons For Not Wanting To Be Retained

The study identified the reasons students do not want to be retained as lecturers in their departments. Table 2 presented the mean score test on those reasons; Low wages of the profession had a mean score of 4.28 ranking 1st , High degree of workload had a mean score of 4.24 ranking 2nd , The university community is not conducive had a mean score of 4.20 ranking 3rd , The profession is time consuming had a mean score of 4.17 ranking 4th, The curriculum is old-fashioned had a mean score of 4.03 ranking 5th, You will always need to be reading and be updated had a mean score of 3.87 ranking 6th , Poor public image of the profession had a mean score of 3.83 ranking 7th , Lack of respect for the profession had a mean score of 3.55 ranking 8th, Need to be carrying out research and paper writing had a mean score of 3.40 ranking 9th, I do not just have passion for teaching had a mean score of 3.25 ranking 10th, Low Status profession had a mean score of 2.99 ranking 11th , There is a strain in my relationship with Lecturers had a mean score of 2.72 ranking 12th, and Fear of sexual harassment had a mean score of 2.26 ranking 13th. The study showed that the most common reason why students don’t want to be retained as lecturers were Low wages of the profession, High degree of workload and The university community is not conducive[12]and [13].

**Table 2 REASONS FOR NOT WANTING TO BE RETAINED**

|  |  |  |  |
| --- | --- | --- | --- |
| **Reasons** | **Mean score** | **Std. Deviation** | **Ranking**  **Index** |
| Low wages of the profession | 4.28 | .975 | 1st |
| High degree of workload | 4.24 | .931 | 2nd |
| The university community is not conducive | 4.20 | 1.006 | 3rd |
| The profession is time consuming | 4.17 | 1.007 | 4th |
| The curriculum is old-fashioned | 4.03 | .939 | 5th |
| You will always need to be reading and be updated | 3.87 | 1.178 | 6th |
| Poor public image of the profession | 3.83 | 1.164 | 7th |
| Lack of respect for the profession | 3.55 | 1.109 | 8th |
| Need to be carrying out research and paper writing | 3.40 | 1.402 | 9th |
| I do not just have passion for teaching | 3.25 | 1.384 | 10th |
| Low Status profession | 2.99 | 1.259 | 11th |
| There is a strain in my relationship with Lecturers | 2.72 | 1.069 | 12th |
| Fear of sexual harassment | 2.26 | 1.240 | 13th |

1. Strategies To Attract And Retain Students Into Teaching

The study went on to investigate the strategies to attract and retain students into teaching. Table 3 presented the mean score test on these strategies; Increased Salary had a mean score of 4.23, both Through favorable policies and Improving work life balance had a mean score of 4.79, Using exchange programme had a mean score of 4.74, Implementing a “zero tolerance policy” for sexual harassment had a mean score of 4.72, Promoting incentives and reward in the profession had a mean score of 4.69, Empowering and supporting women in the teaching profession had a mean score of 4.68, Revamped and Innovative Curriculum and Training and re-training of female lecturers both had a mean score of 4.67, Scholarships to Masters and Doctoral level had a mean score of 4.63, Increased funding for research works and Well-defined career path both had a mean score of 4.61, Strong Mentorship programmes had a mean score of 4.53, Increase industry participation with teaching practice had a mean score of 4.52, Improvement of the work environment and infrastructure had a mean score of 4.51 , both Exposure of lecturers to the industry while teaching and Giving quotas to female students had a mean score of 4.40.

From Table 3 Increased Salary, Through favorable policies and Improving work life balance are the major strategies to attract and retain female students into teaching profession

**Table 3 STRATEGIES TO ATTRACT AND RETAIN STUDENTS INTO TEACHING**

|  |  |  |  |
| --- | --- | --- | --- |
| **Measures** | **Mean Score** | **Std. Deviation** | **Ranking Index** |
| Increased Salary | 4.83 | .613 | 1st |
| Through favorable policies | 4.79 | .524 | 2nd |
| Improving work life balance | 4.79 | .582 | 2nd |
| Using exchange programme | 4.74 | .530 | 4th |
| Implementing a “zero tolerance policy” for sexual harassment | 4.72 | .559 | 5th |
| Promoting incentives and reward in the profession | 4.69 | .773 | 6th |
| Empowering and supporting women in the teaching profession | 4.68 | .606 | 7th |
| Revamped and Innovative Curriculum | 4.67 | .591 | 8th |
| Training and re-training of female lecturers | 4.67 | .659 | 8th |
| Scholarships to Masters and Doctoral level | 4.63 | .685 | 10th |
| Increased funding for research works | 4.61 | .914 | 11th |
| Well-defined career path | 4.61 | .734 | 11th |
| Strong Mentorship programmes | 4.53 | .666 | 13th |
| Increase industry participation with teaching practice | 4.52 | .823 | 14th |
| Improvement of the work environment and infrastructure | 4.51 | .713 | 15th |
| Exposure of lecturers to the industry while teaching | 4.40 | .892 | 16th |
| Giving quotas to female students | 4.40 | .868 | 16th |

The study evaluated the characteristics of the respondents used in this survey. Table 4 presented the summary of the background information of the lecturers surveyed. According to table 4.4, Lecturers of Architecture department make up (10) 38.5 % of the respondents, Building Technology lecturers make up (3) 11.5% of the respondents, Estate Management lecturers make up (4) 15.4% of the respondents, Mechanical Engineering lecturers make up (3) 11.5% of the respondents, Civil Engineering lecturers make up (3) 11.5% of the respondents and Electrical Engineering Lecturers make up (3) 11.5% of the respondents. Years of teaching experience are broken down as follows: (3) 11.5% % of respondents have 1-10 years of experience, (22) 84.6 % of respondents have 11-20 years of experience, and (1) 3.8 % of respondents have 21-30 years of experience.

Table 4.4 reveals that (14) 53.8% of respondents have MSc/M.Tech/M.Eng qualification, and (12) 46.2% of the respondents are Ph.D holders. To conclude this section of the study the respondents were asked if they are satisfied with their teaching profession, (4) 15.4% were Neutral,(12) 46.2% were Satisfied, while (10) 38.5% were Very Satisfied.

**Table 4** **Summary of Background Information For Lecturers**

|  |  |  |  |
| --- | --- | --- | --- |
| **Background Information** | **Frequency** | **Percent** | **Cumulative Percent** |
| **Department** |  |  |  |
| Architecture | 10 | 38.5 | 38.5 |
| Building Technology | 3 | 11.5 | 50.0 |
| Estate Management  Mechanical Engineering | 4  3 | 15.4  11.5 | 65.4  76.9 |
| Civil Engineering  Electrical Engineering | 3  3 | 11.5  11.5 | 88.5  100.0 |
| **Number of Teaching Years Experience** |  |  |  |
| 1-10 | 3 | 11.5 | 11.5 |
| 11-20 | 22 | 84.6 | 96.2 |
| 21-30 | 1 | 3.8 | 100.0 |
| **Educational Qualification** | |  |  |
| MSc/M.Tech/M.Eng | 14 | 53.8 | 53.8 |
| Ph.D | 12 | 46.2 | 100.0 |
| **Are You Satisfied With Your Teaching Profession?** |  |  |  |
| Neutral | 4 | 15.4 | 15.4 |
| Satisfied | 12 | 46.2 | 61.5 |
| Very Satisfied | 10 | 38.5 | 100.0 |

F.Challenges Faced As A Lecturer In The Teaching Profession

The study identified the challenges the selected lecturers have faced or are facing in the teaching profession Table 5 was presented using mean score test. The study showed that use of Word Lack of incentives and appreciation Inadequate number of staff, Lack of funds to carryout research works ranked 1st, 2nd 3rd, respectively in the challenges faced as a lecturer in the teaching profession.

**Table 5 CHALLENGES FACED AS A LECTURER IN THE TEACHING PROFESSION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Challenges** | **Mean score** | **Std. Deviation** | **Ranking**  **Index** |
| Lack of incentives and appreciation | 4.50 | .648 | 1st |
| Inadequate number of staff | 4.38 | .637 | 2nd |
| Lack of funds to carryout research works | 4.31 | .884 | 3rd |
| Lack of training and re-training | 4.15 | 1.008 | 4th |
| Delay in promotion | 4.15 | .881 | 5th |
| Dealing with unruly behaviour of students | 4.04 | .999 | 6th |
| Poor work-life balance | 3.92 | .935 | 7th |
| Large class size | 3.92 | 1.294 | 7th |
| High degree of workload | 3.88 | .864 | 9th |
| Slow career growth | 3.85 | 1.047 | 10th |
| High rate of stress | 3.85 | .881 | 10th |
| Extended work hours | 3.81 | 1.021 | 12th |
| Need to keep publishing research works | 3.69 | .884 | 13th |
| Evaluation of students is time consuming | 3.65 | .892 | 14th |
| Favoritism | 3.62 | 1.023 | 15th |
| Low wages of the profession | 3.62 | .637 | 15th |
| Poor work environment and infrastructure | 3.58 | 1.102 | 17th |
| High bureaucracy in the teaching profession | 3.46 | 1.140 | 18th |
| The curriculum is old-fashioned | 3.42 | .703 | 19th |
| Distorted image of the profession | 3.31 | .838 | 20th |
| Gender discrimination | 2.81 | .567 | 21st |

1. Benefits Accrued From Increasing Female Construction Graduates Participation

The study identified the benefits accrued from increasing female construction graduates participation Table 6 was presented using mean score test. The study showed that Exposure to female role models 4.58, It would improve gender equality 4.46, Higher female participation 4.42, in construction works 4.42 , Improve the self-esteem of female students and Women are better counselors 4.42 ranked 1st, 2nd 3rd, respectively[14].

Table 6 **BENEFITS ACCRUED FROM INCRESING FEMLE CONSTRUCTION GRADUATES PARTICIPTION**

|  |  |  |  |
| --- | --- | --- | --- |
| **BENEFITS** | **Mean score** | **Std. Deviation** | **Ranking**  **Index** |
| Exposure to female role models | 4.58 | .643 | 1st |
| It would improve gender equality | 4.46 | .582 | 2nd |
| Higher female participation in construction works | 4.42 | .703 | 3rd |
| Improve the self-esteem of female students | 4.42 | .643 | 3rd |
| Women are better counselors | 4.42 | .643 | 3rd |
| Improve Participation and Persistence. | 4.38 | .637 | 6th |
| Diversity of ideas | 4.38 | .697 | 6th |
| Improved academic performance of students | 4.35 | .892 | 8th |
| Improved communication with student needs | 4.35 | .892 | 8th |
| Improved welfare for female lecturers | 4.31 | .618 | 10th |
| More women in the management positions | 4.27 | .533 | 11th |
| Improved condition of service in the profession | 4.16 | .688 | 12th |
| Reduced cases of sexual harassment | 4.15 | .675 | 13th |
| Improved Public image | 4.08 | .688 | 14th |
| Attracting the best to the profession | 4.00 | .748 | 15th |

1. Strategies To Attract And Retain Students Into Teaching

The study went on to investigate the strategies to attract and retain students into teaching. Table 7 presented the mean score test on these strategies; Improving work life balance had a mean score of 4.77 ranked 1st, Increased Salary had a mean score of 4.76 ranked 2nd, Using exchange programme had a mean score of 4.69 ranked 3rd. From Table 7 Improving work life balance Increased Salary, and Using exchange programme are the major strategies to attract and retain female students into teaching profession

**Table 7 STRATEGIES TO ATTRACT AND RETAIN STUDENTS INTO TEACHING**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **MEASURES** | | | **Mean score** | | **Std. Deviation** | **Ranking**  **Index** |
| Improving work life balance | | | 4.77 | | .430 | 1st |
| Increased Salary | | | 4.76 | | .597 | 2nd |
| Using exchange programme | | | 4.69 | | .549 | 3rd |
| Exposure of lecturers to the industry while teaching | | | 4.69 | | .471 | 3rd |
| Empowering and supporting women in the teaching profession | | | 4.69 | | .471 | 3rd |
| Increased funding for research works | | | 4.69 | | .618 | 3rd |
| Implementing a “zero tolerance policy” for sexual harassment | | | 4.69 | | .471 | 3rd |
| Training and re-training of female lecturers | | | 4.65 | | .485 | 8th |
| Through favorable policies | | | 4.65 | | .562 | 8th |
| Promoting incentives and reward in the profession | | | 4.65 | | .562 | 8th |
| Revamped and Innovative Curriculum | | | 4.62 | | .571 | 11th |
| Scholarships to Masters and Doctoral level | | | 4.62 | | .496 | 11th |
| Strong Mentorship programmes | | | 4.58 | | .578 | 13th |
| Giving quotas to female students | | | 4.58 | | .504 | 13th |
| Improvement of the work environment and infrastructure | | | 4.54 | | .508 | 15th |
| Increase industry participation with teaching practice | | | 4.54 | | .706 | 15th |
| Well-defined career path | | | 4.54 | | .582 | 15th |
|  |  |  | |

## **V. CONCLUSION AND RECOMMENDATION**

Strategies for attracting and retaining females into construction related programmes were reviewed. Attracting female students will require adequate career counseling, a gender inclusive learning environment, exposure to female role models and personal motivation from the student[9];[10] and [14]. Retaining females in construction related programmes necessitates that the image of the industry be improved particularly in three areas: one, the male dominated industry should be changed into one that is inclusive and pluralistic where women are well represented in all sectors of the industry[8],[9] and [15]. The following conclusions can be reached from the study:

* The study reveals that : Low wages of the profession, high degree of workload and the university community not being conducive are the most common reasons among female construction students for not wanting to be retained in the teaching profession.
* The major benefits of increasing the participation of female construction graduates as shown from the study include: Exposure to female role models, improved gender equality, higher female participation in construction works and improved self esteem of female students
* According to the results of the study, lack of incentives and appreciation, inadequate number of staff and lack of funds to carry out research works are the most common challenges female lecturers face in the teaching profession

**VI. RECOMMENDATIION**

The following recommendations drawn from the findings of this study are put forward for construction professionals, construction firms and other Nigerian construction industry stakeholders;

Based on the findings of this work, the following recommendations are made-

* More employment quota should be allocated to the women. This will allow more qualified women to participate fully and to be well represented in teaching profession within the university walls.
* Outstanding incentives should be given to female lecturers by the government through the federal and state ministries of education. This will motivate those that are already in the system and also encourage more females to take into teaching at the university level

Acknowledgement

The support of Covenant University Center for Research and Development(CUCRID) is appreciated for the support of this research publication.

**REFERENCES**

[1] B.M. Bagilhole, A.R.Dainty, & R.H. Neale (2000). Women in the construction industry in the UK: a cultural discord?. *Journal of women and minorities in science and engineering*, *6*(1).

[2] L.W.Chege, & P.D. Rwelamila (2000). Risk Management and Procurement Systems-an Imperative Approach. *CIB REPORT*, 373-386.

[3] R.M. Choudhry, & K. Iqbal Identification of risk management system in construction industry in Pakistan. *Journal of Management in Engineering*, (2013).*29*(1), 42-49.

[4] D.F. Cooper, S. Grey, G. Raymond, & P. Walker  *Project risk management guidelines*. Wiley.(2005).

[5] X. Dong Long workhours, work scheduling and work-related injuries among construction workers in the United States. *Scandinavian journal of work, environment & health*, (2005).329-335.

[6] A. Del Cano, & M.P. de la Cruz Integrated methodology for project risk management. *Journal of construction engineering and management*, (2002).*128*(6), 473-485.

[7] S.M. El-Sayegh Project risk management practices in the UAE construction industry. *International Journal of Project Organisation and Management*, (2014).*6*(1-2), 121-137.

[8] A. Enshassi, & P.E. Mayer Managing risks in construction projects, 18th Internationales Deutsches Projekt Management Forum. *Ludwig burg, Germany*.(2001).

[9] K.N. Ginige, R.D. Amaratunga, & R. Haigh. Improving construction industry image to enhance women representation in the industry workforce. *Management*,  (2007).*377*, 385.

[10] M.P. Hazley  *Successful female students in undergraduate computer science and computer engineering: Motivation, self-regulation, and Qualitative characteristics*. The University of Nebraska-Lincoln.(2016).

[11] J. Liu, X. Zhao, X. & P. Yan. Risk paths in international construction projects: Case study from Chinese contractors. *Journal of construction engineering and management*, (2016). *142*(6), 05016002.

[12] G.T. Luka, & Y. Ibrahim . Identification and assessment of key risk factors affecting public construction projects in Nigeria: Stakeholders perspectives. In *The Nigerian Institute of Quantity Surveyors: 2nd Research Conference–ReCon2 1st to*(2015, September). (p. 707).

[13] M. Mills A systematic approach to risk management for construction. *Structural survey*.(2001).

[14] P.W. Morris, L. Crawford, D. Hodgson, M. Shepherd, & J. Thomas Exploring the role of formal bodies of knowledge in defining a profession–The case of project management. *International journal of project management*, (2006).*24*(8), 710-721.

[15] P.W. Morris, A. Jamieson, & M.M Shepherd Research updating the APM body of knowledge 4th edition. *International Journal of Project Management*, (2006).*24*(6), 461-473.

[16] E.O. Nnadi, E.C. Enebe & O.O. Ugwu Evaluating the awareness level of risk management amongst construction stakeholders in Nigeria. *International Journal of Construction Engineering and Management*, (2018).*7*(1), 47-52.

[17] H.A. Odeyinka, A. Oladapo & J.0. Dada An assessment of risk in construction in the Nigerian construction industry. In *International Symposium on Globalisation and Construction.*  (2004, November). (pp. 359-368).

[18] O.O. Odimabo, & C.F. Oduoza Risk assessment framework for building construction projects’ in developing countries. *International Journal of Construction Engineering and Management*, (2013).*2*(5), 143-154.

[19] I.O. Olamiwale Evaluation of risk management practices in the construction industry in Swaziland. *Master of Quantity Surveying Thesis, Tshwane University of Technology, Pretoria, South Africa*.(2014).

[10] T. Oluwakiyesi Nigerian construction industry: A haven of Opportunities. *Lagos, Nigeria: Vetiva Capital Management Limited*.(2011).