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# Gender Inequality in the Nigerian Power Sector: The Case of Nigerian Electricity Companies.

Dr Raphael Onoshakpor

Rivers State University, Port Harcourt, Nigeria.

# Chioma Onoshakpor

Robert Gordon University, UK

#### Abstract

A gender imbalance in the energy sector workforce is evident in most countries worldwide, yet women's participation in, and contributions to, the energy industry have been under researched and lacks characterization. As the energy sector transitions from a fossil-fuel system toward a more sustainable renewable system, new opportunities to embrace a more inclusive energy workforce are emerging. However, we are concerned that while within a developed context, the achievement of gender parity is seemingly possible, the situation in Nigeria appears not to be. This research assesses the role and contribution of women through a quantitative analysis of 31 employees of public and private Nigerian electricity companies, comprising both managers and regular employees. The findings reveal a gendered perception in how respondents perceive work-life balance and the recruitment process within the sector. This study will contribute to policy interventions within the sector.

Keywords: Gender Inequality, Nigerian Electricity Companies, Energy Sector, Power Sector

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#### I. Introduction

Recent census data has shown that women in Nigeria make up about 50% of their population [1]. Therefore, including women in key sectors such as the energy sector and in particular power sector that significantly contributes to the Nigerian economy would add value and could be termed "smart economics", where additional manpower could be harnessed for the nation's benefit. Researchers argue that there needs to be more gender-disaggregated data for the energy sector as a whole and also for the subsectors, which include the power sector, oil and gas, renewables, etc. [2]. Without this, misleading data and information about a specific sector may be apparent [3].

We argue that the energy (power) sector should priorities gender diversity as the move towards a sustainable renewable agenda is still in its early stages. This strategy will help close the gender inequality gap in a move towards achieving United Nations SDG5, which is targeted at equal opportunities for women and girls. We explore gender diversity in the power sector workforce in Nigeria and highlight the value of women's participation in the move towards sustainable systems.

This paper, therefore, has the following research question: What is the impact of gender inequality in the power sector in Nigeria, and what are the benefits of including this disadvantaged group in this sector?

#### **II. Literature Review**

Studies on gender and gender inequality in the energy sector have focused mainly on consumer energy issues, often referred to in the industry as "downstream" issues, especially emphasising the impact of clean cooking technologies on women's health, rural electrification, and improved energy access [4]. Despite the importance of these studies, there has been considerably less research on the role of women in the generation, transmission, or distribution of electric power—referred to in the industry as "upstream." One result of the consumer focus is that any detrimental impacts of gender disparities associated with electricity infrastructure or power sector value chains have remained poorly understood. This has contributed to a knowledge gap about the

role of women in the power sector and limited our knowledge about how to potentially improve women's participation in the generation, transmission, and distribution of power.

Although women are represented in all employment categories in this sector, they are not equally represented in all units, such as technical field operations, high-voltage line operations, and field maintenance, which remain overwhelmingly male-dominated [1]. Interestingly, these units have the highest number of employees within the DISCOs (Distribution Companies); therefore, the literature suggests that women are invariably excluded from most jobs in DISCOs. Even without considering the large number of men working in these technical units, almost all other companies still report gender imbalances in operational units, 2016). Gender imbalances are, therefore, evident across the entire spectrum of Nigerian electricity companies, which is an indication that gender-neutral policies may be lacking and more research is needed to understand the reasons and/or mitigate gender disparities in companies.

#### **III. Social Feminist Theory**

To understand the impact of gender expectations and realities, the authors adopt a feminist lens to our analysis. This is to avoid producing a male narrative, as it will tend to represent women as the 'other' about the male standard [5] (Snyder, 2008). Instead, we look to avoid the folly of mainstreaming female experiences to mirror the male norm by understanding what it is to be a female in Utility Establishments in Sub-Saharan Companies and the implications this has for Private Nigerian Electricity Companies in practice. This study adopts social feminist theory to underpin the research by recognizing and comparing the socialized experiences of male and female employees of private Nigerian electricity companies [6] opine that socialist feminists believe that sexism in any society is caused by multiple sources of oppression (e.g., gender, class, nationality, and race), which leads to an inevitable class or status from stratification influenced by social relationships embedded in history and established by social systems.

From a general perspective, a major influencing factor that can be seen to differ between gender is the perceived imbalance in the electricity industry, like many others, is equal pay for women which, as evidenced by [7] the authors highlight the concerns of prospective female employees regarding pay disparity. The authors further explain that the factors that influence this gender bias include tribal norms, and societal and community behavior, amongst other systemic problems. In a similar plight concerning Nigeria, [8] attribute the different cultural factors and a somewhat subtle subjugated tendency that has historically become norms in many cultures and has more recently been adopted into modern practices, including those in work environments. The authors also acknowledge that the phenomenon somehow coexists with the maternal nature of African women who display enormous power that binds the community and as such, are not left out entirely but, unfortunately, do not feature in key leadership roles.

Adverse working conditions in the power industry is another factor that has been sighted to affect the attractiveness of jobs in the sector to prospective female employees. One major consideration, as an example, is the consideration of adequate maternity leave, before and after childbirth which may influence the choice of aspiring mothers as a subset of the gender from accepting jobs in the sector and employers wanting to recruit from this pool of candidates [9] explains that remuneration has sometimes led to dissatisfaction of certain jobs and can be directly linked to employee separation. The author highlights that although the phenomenon of harsh working conditions generally applies to both genders, in the case of women, there is a tendency that, due to cultural factors, women tend to be more affected by unfavorable working conditions. In addition, other conditions like poor encouragement for women to turn out for jobs that are perceived to be more technical can serve as discouragement from women even where this is not the case. Importantly, it is necessary to highlight that despite numerous speculations, both genders have been seen to be necessary to achieve a balanced society and adequately diverse industries [10].

As such, this paper looks beyond structural and experiential explanations of the challenges and benefits of gender representation and instead looks to more measurement-based explanations to bolster the role of gender. We highlight private Nigerian electricity companies as a specific point in the power sector where gender may become a critical factor.

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#### **IV. Methodology**

**Population and sample** 

The target population were employees of public and private Nigerian electricity companies, comprising both managers and regular employees. Purposive sampling was used to select participants with rich experience as an employee in the sector. Samples were collected from 31 participants, 56.1% female and 48.4% male.

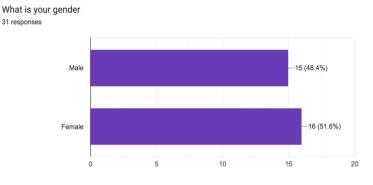


Fig 1. Gender of participants

The participants were also holding different positions, such as Business owner (0%), Management staff, Operations personnel (33.3%), Support staff (10%) and Clerical staff (20%).

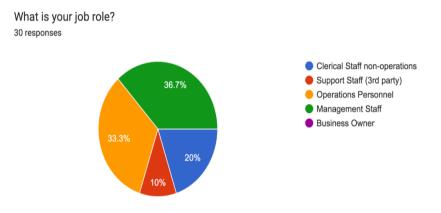


Fig 2. The job role of participants

The age of the participants was also varied between 21-60 years and the years of experience was between 0 years and over 23 years in service.

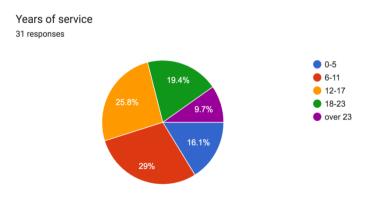


Fig 3. Years of experience of participants

#### The survey instruments

The survey instrument delivered through survey monkey (an online data collection platform) had 20 questions. Questions 1–4 collected the demographic data of the participants, including age, gender, job role and years of service. Questions 5–12 collected gender-related data, and questions 13-20 collected data about skills required to thrive within the sector.

#### Data analysis

A total of 50 surveys were administered, but only 31 responses were completed to satisfaction. The collected data was then analysed statistically using relevant graphs and charts plotted using advanced Excel.

#### V. Results and findings

This section analyses the data received and presents it concerning what the existing literature suggests and draws out conclusions specific to Nigerian Electricity Sector.

#### Gender Imbalance in the Nigerian Electricity Sector

One of the prevailing stereotypes or issues is that the energy sector is male-dominated, making it difficult to attract and retain women. This study, from the data, shows 80.6% agree that the sector has an imbalanced representation of the male and female gender. When further ascertaining some of the reasons behind these figures, this research identifies some novelty and contributes to the field of research.

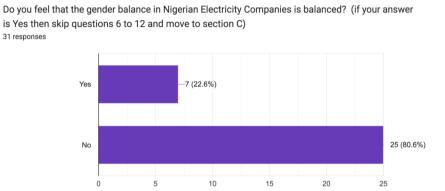
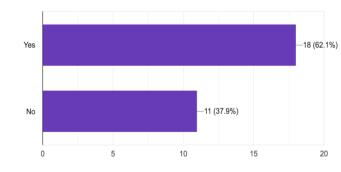


Fig 4. Gender Imbalance in the Workplace in the electricity sector

#### Gender Imbalance in the Nigerian Electricity Sector Recruitment

Some authors have linked this gender imbalance to start from the recruitment processes blaming recruiters for selectively recruiting males and therefore being discriminatory to the female applicants.



Do you see gender as a consideration for recruitment in the electricity industry? <sup>29 responses</sup>

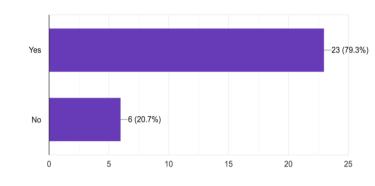
Fig 5. Gender imbalances during recruitment in the electricity sector

62.14% of our respondents agree that the gender imbalance in the sector stems from the recruitment process. Some other of our respondents argue otherwise.

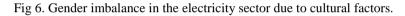
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#### Gender Imbalance in the Nigerian Electricity Sector as a Result of Cultural Factors

79.3% of our respondent's state that cultural factors have limited women's participation in a non-feminine industry such as the power sector where Nigerian electricity companies operate. These factors have restricted them from studying the relevant STEM subjects needed to excel in the industry, ultimately limiting their attractiveness to recruiters.

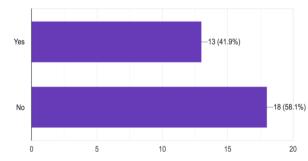


Would you attribute the gender gap in the industry to any cultural factors? 29 responses



#### Gender Imbalance in the Nigerian Electricity Sector Working Conditions and Policy

Moving away from the struggles in getting into the industry, the limitations or struggles continue even when a woman finally enters the industry. The data shows that the working conditions do not favour women. Specifically, this study looks at the implication of maternity leave and how it is often frowned upon by employers in this sector. 56.1% of our respondents do not agree that the maternity leave conditions are favorable, putting this in line with the 51.0% of female respondents and 49% of respondents represented in this study, it is worrisome and should be considered by industry players.



Do Electricity companies give adequate conditions for leave including maternity? 31 responses

Fig 7. Work-based policies of Nigerian electricity companies

#### VI. Conclusion

In conclusion, the authors answer the research question with findings from our data: What is the impact of gender inequality in the power sector in Nigeria, and what are the benefits of including this disadvantaged group in this sector?

The data suggest gender bias in the Nigerian electricity sector which first shows up during the recruitment phase of the industry. A bias presented may be due to two things- lack of relevant education (STEM) subjects to appease the recruiters/HR team and secondly, policies within the sector to retain them, such as maternity leave policies. This study posits that this overlooked group presents an overlooked skill set which, according to 67% of our data, has not been recruited into the sector because of some generalised biases.

We make two recommendations from this study- incentives and a change in industry culture. Incentives should be created for females to find the sector attractive can include work-life balance policies and maternity leave policies for electricity companies. This leads to the next recommendation, which is a change in industry culture which should not allow discrimination based on seeking and granting maternity leave, thereby promoting inclusivity.

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