



## The impact of gender inequality on economic growth: an explanatory sequential mixed methods study of female labour participation in the civil service

Andrew Jia Yi Kam<sup>a</sup>, Jerry Sankay Oboh<sup>a</sup> \*, Zarina Othman<sup>b</sup>, Jusoh Sufian<sup>a</sup>

<sup>a</sup> Institute of Malaysian and International Studies, Universiti Kebangsaan Malaysia, Malaysia

<sup>b</sup> Pusat Citra Universiti, Universiti Kebangsaan Malaysia, Bangi, Malaysia

\* Corresponding author at: [jerrysankayoboh@gmail.com](mailto:jerrysankayoboh@gmail.com)

**Abstract.** Gender inequality is recognised as an impediment to economic growth and development. In Nigeria, several policies have been enacted to eliminate gender inequality. However, studies show that women are grossly marginalised, exploited, and discriminated against in their socioeconomic life. This paper examines the impact of gender inequality and female labour participation in the Nigerian civil service on the economic growth of Nigeria using mix-methods. First, an estimation of the impact of gender inequality on economic growth using panel data regression, followed by content- and consistency-based analysis that examines the factors responsible for gender inequality and discrimination issues women experience in the Nigerian civil service using content- and consistency-based analysis. The findings suggest that gender inequality negatively impacts economic growth and distorts the pool of human capital available to the Nigerian civil service and recommends the use of education and outsourcing of some employment functions to eliminate it effectively.

**Keywords.** gender inequality, female labour participation, civil service, culture and tradition, economic growth.

**JEL Codes.** O11; H70; J7.

**DOI.** <https://doi.org/10.17979/ejge.2022.11.2.8951>

### 1. Introduction

The significance of gender equality as a sine qua non for achieving economic growth and development is globally recognised. The United Nations Sustainable Development Framework (UNSD: 2017) on human rights put gender equality and women's economic empowerment at the core of all development strategies, with the World Bank endorsing it as critical to sustainable and inclusive growth (Devadas & Kim, 2020). It is, therefore, imperative to understand the dynamics of gender inequality and its implication for female labour participation and economic growth.

The civil service as part of the public service contributes to economic growth and development via its contribution to gross domestic product (GDP) from revenue generated, women empowerment, policy formulation and implementation. With about 11 gender equality policies enacted, the Nigerian government have demonstrated its willingness to ensure that women are given equal access and opportunities as men. However, studies still suggest that women are grossly marginalised, continuously exploited and discriminated against in many areas of their socioeconomic life (Adegoke et al., 2016 & Oloni, 2015). In the Nigerian civil service, women are



still challenged by structural barriers such as the glass ceiling and discrimination in development opportunities that limit them from fully exploring their productive capabilities (Oboh et al., 2022 & 2021).

A report from the Canadian International Development Agency (CIDA) showed that in Nigeria, women make up about 24% of civil servants, while men are 76%. Women constitute less than 14% of management and decision-making roles, 17.5% in well-paid and highly skilled roles, while men constitute 86% and 82.5%, respectively (CIDA, 2012). The poor representation of women and the lack of opportunities in decision-making positions in the public service imply that they are under-represented in the country's key decision-making process. This coincides with part of the concerns highlighted in the Beijing Platform for Action<sup>1</sup> (National Bureau of Statistics (NBS), 2018). The civil service puts more men in senior management positions as a way of reinforcing the existing glass ceiling while keeping men in leadership (Fatile & Adejuwon, 2010). This is a concern because the public sector is strategic not just for providing women with employment but also for giving women quality employment. Having more women in paid employment (which is associated with public service) improves their economic well-being, and mitigates gender inequality (Oboh et al., 2022 & 2021). Thus, the role of public service in curtailing gender inequality is significant.

Despite the importance of the issue, the empirical literature on gender inequality and economic growth in Nigeria is sparse, and even lesser are the studies that have been conducted using mixed-method. Therefore, the objective of the study is to examine the determinants and the impact of gender inequality on economic growth in Nigeria. This study contributes to the sparse empirical literature by quantifying the magnitude of the impact of female labour participation and gender inequality in the civil service on the economic growth of Nigeria. In further identifying the determinants, the paper further identifies the gender disparity issues and factors that contribute to gender inequality by coding a gender inequality nexus from face-to-face interviews. This is to provide a new measurement of the forms of gender disparities that influence the civil service.

Using explanatory sequential mixed methods that combine panel data regression and content analysis, the study estimates the impact of gender inequality on economic growth and uncovers the dynamism of gender inequality on female labour participation in the civil service. This combination of econometric- and content analysis is designed to explore a subject matter vertically (depth) and horizontally (breadth), followed by a verification process (Crestwell, 2012). To explore the subject matter vertically, the explanatory sequential mixed methods utilise the within-methods (i.e., the synthesising of the qualitative studies to establish the gender inequality nexus). For horizontal analysis, the between-methods is deployed (i.e., the triangulation of the quantitative and qualitative studies to give a robust insight and a better understanding of gender inequality in the Nigerian civil service and how it impacts economic growth).

---

<sup>1</sup> The 1995 Beijing Declaration and Platform for Action was one of the outcomes of the Fourth World Conference on Women that requires participating countries to acknowledge the voices of women, ensure equal gender participation in the public service and governance, advance gender equality, continuously addressing any obstacle, reduce the increasing poverty rate against women, fostering women advancement and empowerment etc.

The next section examines existing literature and empirical studies to provide a background of knowledge to the study.

## **2. Literature review**

A lot of emphasis on gender inequality has been attributed to culture, religion and other belief systems, which form the core of gender socialisation- a term where women and men are defined to fit certain roles in society. Past literature mainly challenged the definition of roles. When it is biased, it forms the notion of gender inequality or discrimination.

In gender studies literature, there are two major perspectives on the sources of inequality. Qualitative studies by scholars in the radical feminist discipline argued that gender inequality is rooted in biological differences with a focus on procreation and sexuality, while liberal feminists ascribed the relegation of women to culture, lack of educational opportunities and legal constraints as the impediments to women's success in the society (Enyew & Mihrete, 2018; Tong, 2014). Society, by tradition, socialises men to take up leadership, decision-making and major household roles, while women are cast as unpaid domestic labour and low-earning jobs. Therefore, not much attention is given to women's formal learning and development, which forms the basis of female empowerment (Enyew & Mihrete, 2018; Tong 2014).

This is consistent in the Nigerian context, where masculinity and femininity consist of both cultural and social psychological perspectives. The male gender roles are the major emphasis in various societies, while women's cultural values and roles are determined by religion, culture and customary laws that are presided over by men (Okongwu, 2020).

The public service sector has the potential to empower women and avail them of quality employment. This emphasis on empowerment gave rise to the 1994 Beijing Platform for Action, which advocated for 30% women's participation in the public service sector (NBS, 2018). A study by Kpanja & Umar (2018) showed that gender inequality in the Nigerian civil service incapacitates the smooth delivery of government service machinery. This is also consistent with Oboh et al. (2019) empirical analysis whereby gender inequality impacts the revenue generation of the Nigerian civil service negatively. The mechanism in which gender inequality impedes economic growth lies in the underutilization of human capital in a country. By discriminating employment opportunities based on gender, the full potential in the pool of a country's human capital is not fully utilized. Even though the present regulation for entrance, transfer and promotion in the Nigerian civil service is via a competitive examination, cases of nepotism and corruption have impeded the implementation (UNODC, 2020). This further contributes to one of the reasons women are still discriminated against and deprived of employment, quality employment and relegated to background roles irrespective of their educational qualifications (DFID, 2012).

Ogunyemi (2014) explained that gender relations issues in Nigeria have no regard for performance. Rather, it makes cultural melancholy a gender identification that is polarised by internalised prohibition and could lead to the relegation or displacement of the female gender. This is refined in economics and feminism in management, where the attention of feminist

scholars is focused on visible sources of discrimination against women in the labour markets and wages. Policy emphases are focused on women attaining equal status as men in employment, career path, government, and traditional institutions (Nienaber & Moraka, 2016).

Theoretical connections between gender equality and economic growth are linked by decomposing the Solow Model - whereby labour input is decomposed into skills and non-skills, and differentiated by gender. The gender element was initially brought into growth discourse partly due to the argument that women have a higher propensity to save compared to men in their household consumption, hence increasing the country's GDP (Lofstrom, 2008). It was also initially driven by concerns on humanitarian grounds that gender inequality may be detrimental to economic growth because it would breed poverty and disempowerment in a specific gender group (Brummet 2008; Morrison et al., 2007). Distortions in gender and skills level may constitute labour distortions, which subsequently impact economic growth, holding other factors constant. Empirical evidence confirmed this connection and showed that gender inequality distorts the pool of talent available to employers via the gender gap in employment (Oboh et al., 2019; Klasen, 2018; Cuberes & Teignier, 2016).

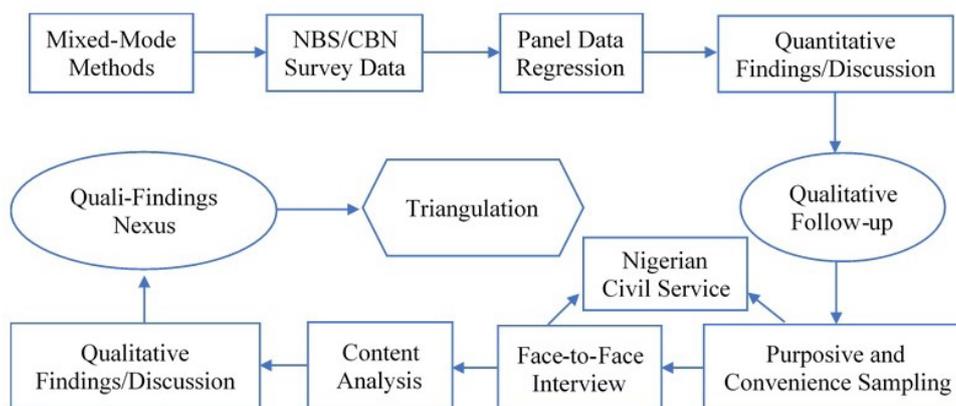
Conversely, Al-Shammari & Al-Rakhis (2017), Ali (2015) and Braunstein (2012) reported otherwise. These studies have shown that gender inequality serves as a stimulus to growth in situations where inequality lowers the cost of labour and not the quality of output. The results are inconclusive, and an extensive search for literature shows that empirical studies are scarce. Nevertheless, the paper hypothesized that ensuring gender equality would lead to higher economic growth, improve women's financial and physical wellbeing and their household bargaining power etc. (Devadas & Kim, 2020).

The studies recognize women as active agents of transformation and development, thus, drawing attention to women's subordination, oppression, and other challenges imposed by their various societies and places of work and how it affects the production of goods and services in an economy over time. In terms of measuring the dependent variable, literature shows that economic growth is commonly measured by gross national product (GNP) and gross domestic product (GDP). Only a small number of studies have explored other forms of national output as indications of economic growth and economic output. Otteson (2004) explained that Adam Smith posited in his wealth of nations that an economy's annual revenue would always be equal to the exchangeable value of the whole total output from its industries or the same as the exchangeable value. Smith also recommended that capital should be invested in a way that generates revenue for the economy. This premise suggests that annual revenue generated by an economy is also an indication of the economy's level of productivity. Alternatively, Oboh et al. (2019) have shown that government capital expenditure and female labour participation positively impact state-generated revenue.

The methodology that links both quantitative and qualitative literature will be discussed in the next section.

### 3. Methodology

The research utilises explanatory sequential mixed-mode methods that comprise quantitative and qualitative analyses.



**Figure 1.** An overview of the explanatory sequential mixed-model methods.

The method follows a procedure starting with the quantitative analysis that estimates the relationship between gender inequality and economic growth using a panel data regression technique before the qualitative analysis that uncovers the factors responsible for gender inequality and the gender disparity issues in the civil service using a content- and consistency-based analytical technique as depicted in figure 1 below.

The findings from both the quantitative and qualitative analyses were synthesised using a between-methods triangulation technique, while the gender inequality nexus in the qualitative analysis was derived using a within-methods triangulation technique. The triangulation method increases the credibility and validity of research findings since the study uses multiple techniques at multiple levels. For example, the empirical study uses official macro-level data (i.e. employment, education level, etc.) while the discourse analysis collects more micro-data level data. Results from macro-level estimation enable the study to identify key (statistically significant) variables, which will be further verified (triangulated) at the micro-level interviews. The micro-level interviews, in return, will further provide inputs to re-confirm the state of gender inequality at the country level. In other words, the qualitative study provides support and extends the findings from the empirical model. Combining both methods provide depth and insights into the impact of gender inequality on economic growth and female labour participation in the Nigerian civil service.

### 3.1 Quantitative data and model

The study uses the Solow growth model and used interstate cross-sectional data from 36 states in Nigeria from 2008 to 2016. The Solow growth model was augmented to account for human capital following Mankiw et al. (1992):

$$Y_t = K_t^\alpha H_t^\beta (A_t L_t)^{1-\alpha-\beta} \quad [1]$$

$H_t$  is the human capital stock,  $\beta$  and  $1-\alpha-\beta$  are the elasticities of human capital and effective labour, respectively.  $K_t$  is physical capital.  $Y_t$  is output. The assumption of decreasing return to scale for investment to output is  $\alpha+\beta < 1$ .  $H_t$  depreciates at the same rate as  $K_t$ . Similar to the Solow-Swan, a fraction of output unconsumed or saved in each period  $sY_t$  is invested in both physical and human capital. Therefore,  $s = sK + sH$ , resulting in two fundamental dynamic equations in the model. The reduced forms of physical capital and human capital are as follows:

$$k_t^* = s_k y_t - (n + g + \delta) k_t \quad [2]$$

$$h_t^* = s_h y_t - (n + g + \delta) h_t \quad [3]$$

$s_k$  and  $s_h$  are fractions of saved output invested in physical and human capital, respectively. Imposing a steady-state of  $k_t^* = h_t^* = 0$ , and taking the natural log of equation 1, the final specification is as follows:

$$Growth = \ln A(0) + gt + \frac{\alpha}{1-\alpha-\beta} \ln(s_k) + \frac{\beta}{1-\alpha-\beta} \ln(s_h) - \frac{\alpha+\beta}{1-\alpha-\beta} \ln(n + g + \delta) \quad [4]$$

In this form, growth is determined by physical capital, human capital and effective labour. Human capital in this study is proxy by junior or senior cadre, and (in)efficiency of labour is assumed by the disparity in the skill levels in gender compositions – which is grossly interpreted in the literature as gender inequality in education or employment positions.  $A(0)$  or technology is retained from the original specification of the Solow model.

Therefore, the final specification model is specified as:

$$\ln TSR_t = LP_t + \alpha \ln SGCE_t + \beta_1 \ln JFP_t + \beta_2 \ln SFP_t + \beta_3 \ln DJMFP_t + \beta_4 \ln DSMFP_t + \varepsilon_t \quad [5]$$

Where the dependent variable is the logarithm of the growth rate of total state revenue ( $\ln TSR$ ) (see Oboh et al., 2019); it is revenue generated by the states annually. It is proxied as economic growth due to the unavailability of state-level gross domestic product (GDP or output) data in Nigeria. As highlighted in the literature review, government revenue can be a mirror equivalence of the monetary value of all the goods and services produced in an economy. It consists of revenue generated via levelling of fees, penalties or fines, taxes, property income derived from assets ownership, sales of goods and services, licenses and transfers imposed by government

units, amongst others (Adenuga & Chike, 2013). The data for Female Labour Participation in the junior and senior cadre of the civil service (JFP/SFP) were sourced from the National Bureau of Statistics Statistical Report on Women and Men, while data for State Government Capital Expenditure (SGCE) and annual Total State Revenue (TSR) were from the Central Bank of Nigeria Annual Report from. The proxy for gender inequality (DJMFP, DSMFP) and Labour Productivity (LP) were computed using the data from the aforementioned sources. LP is the proxy for technology within the model.

### **3.2 Qualitative data and methods**

Content-and consistency-based analysis introduced by Oboh et al. (2021) was used to analyse individuals' subjective experiences, views, and opinions from the interview that was conducted in 2018. The process involves the coding of the interview transcripts, counting of concepts, and frequency analysis.

#### ***The participants***

Twenty-seven participants were selected using purposive and convenience sampling techniques. The participants comprised eighteen female and nine male civil servants between the ages of thirty-five and sixty-three years<sup>2</sup>. Thirteen of the participants are from the junior cadre, and fourteen are from the senior cadre. Twenty-two of the participants were stationed in the Federal Capital Territory (FCT), while the remaining five participants were from five other states that visited the FCT for training. The participants were from ten ministries and were selected based on the criteria below.

- Employment: The participant must be an employee of the Nigerian civil service.
- Tenure: The participant must be employed in the Nigerian civil service for a minimum of 10 years.
- Qualification: The participants are expected to have a minimum qualification of a first leaving school certificate for employees in the junior cadre and a first degree for employees in the senior cadre.

Using these criteria, the study assumed that the selected participants are familiar with and possess extensive experience pertinent to gender inequality in the civil service. Also, due to the sensitivity of the subject matter, the participants were selected voluntarily.

The focus of the qualitative study is on examining women's experiences. The gender distribution of the participants is of the ratio of two-to-one, with women constituting two and men one. The study account for the gender ratio of women and men based on their responses in

---

<sup>2</sup> The disparity in the number of female and male participant is not an issue as our research objective is not about identifying the differences between male or female responses. We leave that for future research.

percentages, i.e., the total number of female or male civil servants that suggested the coded categories out of the total number of their gender representation, respectively.

### **Data collection**

We collected the data by administering face-to-face interviews with semi-structured interview questions. The interview questions follow a repetitive pattern that addresses the factors that contribute to gender inequality and gender disparity issues. Two major questions were asked of the participants. Each of the questions was asked three times<sup>3</sup> using different sentence structures (meaning they were paraphrased). Thus, bringing it to a total of six questions. The responses from the interviews were recorded using a voice recorder.

The reason for the repetition in questioning is to ensure consistency. In this study, we introduced a new consistency measure for accounting and validating responses from the interview sessions. To avoid double-counting and overemphasizing the participant responses, the study assumed that:

- The participant would be consistent in all three questions. If that is the case, the consistency would be measured as 3/3.
- If the participant answers no to two interview questions and yes to one that addresses the same interview question, the level of consistency would be measured as 1/3.

The results are converted to percentages by multiplying the outcomes (i.e. 2/3) by 100<sup>4</sup>.

## **4. Findings**

The empirical analysis is divided into three sections: quantitative, qualitative and triangulation. The quantitative section presents the findings from the panel data regression, the qualitative section presents the content analysis in the form of the gender inequality nexus while the triangulation presents a causal relationship via the gender inequality nexus.

### **4.1 Empirical analysis: panel-data estimation**

A Hausman test was conducted, and the fixed-effect estimator was used. The estimation also included a robust fixed-effects panel data regression to control for heteroscedasticity<sup>5</sup>. The results can be seen in Table 1. Issues of multicollinearity are not severe, as seen in Appendix A2.

The findings from the empirical model suggested that female labour force participation at the senior cadre (SFP) and its gender inequality indicator (DSMFP) are not significant, while female

---

<sup>3</sup> Our pilot study showed that some civil servants are always trying to be politically correct and tend to only give credible answers after going through a series of similar questions. This pattern is similar to participant's behaviour exhibited in focused group interviews, thus, the need to paraphrase the questions.

<sup>4</sup> The total number of responses that identified gender inequality is calculated from the 3 interview questions. It is then divided by the "expected outcome" and multiplied by 100. Example: If 5 participants say there is GI the expected consistent outcome will be 15 (3 X 5 "YES" responses). However, if some participants answered NO even though the questions were only paraphrases, the consistency only show at 66.7 % (as in 10/15 X 100).

<sup>5</sup> Data limitations has prevented the study to include dynamics component. Hence a panel fixed-effect estimator is used in this study.

labour participation at the junior cadre (JFP), gender inequality indicator for the junior cadre (DJMFP), state government capital expenditure (SGCE) and labour productivity (LP) are significant<sup>6</sup>.

JFP is significant at a 95% confidence level which suggests that a percentage increase in female labour participation would result in a 0.06% increase in total revenue. Therefore, employing and empowering more women in the junior cadre of Nigerian civil service would be beneficial to the economy. This is not the case for gender inequality in the junior cadre, it is significant at a 90% confidence level, suggesting that forgoing women's employment in the junior cadre in favour of men by a percentage would make economic growth worse off by 0.04%.

SFP and DSMFP are insignificant. This may be a data-related problem, severe gender imbalance in employment, poor employment management or the ghost worker syndrome<sup>7</sup> that has plagued the public service for several decades. The level of technological advancement and government capital expenditure were significant at a 95% confidence level, suggesting that a percentage advancement in technology and an increase in government spending on capital spending would result in a 5% and 0.21% increase in economic growth, respectively.

To ensure the model is robust, a robustness check on the model is conducted. This was done by reversing the calculation on the gender inequality indicator from the original (female subtracting male) to (male subtracting female) in different cadres. We anticipate the latter to be insignificant because the differences in male and female participation are the main contribution to inequality and not vice-versa. The result is in appendix A3. Although only LP, SGCE and JFP are significant, all other variables are correctly signed and consistent with the results in Table 1 – thus, suggesting that the empirical model is robust. The key variable of interest, *djfmfp* is insignificant in the robustness check model, while its mirror *djmfp* is significant. This is also consistent with our assumptions, which further strengthened the robustness of the model.

**Table 1.** Panel data regression: robust fixed effect model.

<i>lnTSR</i>	Coef.	P> t
LP	0.0548	0.0160
<i>lnSGCE</i>	0.2073	0.0000
<i>lnJFP</i>	0.0576	0.0350
<i>lnSFP</i>	0.0039	0.8920
<i>lnDJMFP</i>	-0.0399	0.0970
<i>lnDSMFP</i>	0.0328	0.3050
Cons	3.2273	0.0000
N = 148 Prob > F = 0.0000		Sigma_u = 0.1819 Sigma_e = 0.3123 rho = 0.2534

<sup>6</sup> Panel Unitroot (Levin- Lin- Chu) test shows that test statistic  $t = -2.0015$  is significantly less than zero ( $p < 0.00005$ ), so we reject the null hypothesis of a unit-root in favor of the alternative that *lnTSR* is stationary (that is, that  $\varphi < 0$ ).

<sup>7</sup> Agboola, 2018; Igbokwe-Ibeto et al., 2015. This is an act of stealing from the State and Federal Government at large under the disguise of paying wages to employees, and, these employees do not exist in a person.

## 4.2 Qualitative analysis

The results from the content- and consistency-based analysis are divided into three parts. Since this section follows a qualitative framework, the analysis is based on inductive reasoning. It starts with identifying the factors responsible for gender inequality. Using these factors, the study identifies gender disparity issues that are related to the identified factors. Finally, we form a conjecture or conclusion which represents the gender inequality nexus in the Nigerian civil service. This new finding is depicted in Figure 2 (which will be discussed later). The consistency tables, the number of responses and the participants used for the content analysis are in appendices B1, B2 and B3.

### ***Factors responsible for gender inequality***

The study revealed that the factors fuelling gender inequality in the Nigerian civil service are seen from three perspectives. Those with origins stemmed from external factors (exogenous factors), internal (endogenous factors) and both (exo-endogenous factors).

#### **A. Exogenous factors**

Exogenous factors encapsulate two key sources in which gender discrimination against women thrives in the Nigerian civil service. These sources are the deficit in education and religion, with consistency rates of 88.0% and 81.0%, respectively. The findings suggest that deficits in education as well as religious biases impact women's availability for employment negatively. Both of these factors affect women's skill set and the quality of employment they received, as narrated in the responses in both female (FP) and male participants (MP) excerpts below.

*...majority of us women don't have the opportunity...in education. We do more house chores and don't have enough time to study... (FP18)*

*... There are some religious backgrounds where the women in the North are restricted from going out... (MP23)*

#### **B. Endogenous factors**

The endogenous factors comprise two main factors and two subcategories which are i) stigmatisation of women and ii) the operational structure of the civil service. It is further decomposed into femininity, decision-makers, and employees' preferences. These internal factors fuel gender discrimination against women from within the civil service.

With a consistency rate of 67.7%, 63.9% for the main factors, and 81.5% and 61.1% for the sub-factors, respectively (Appendix B2), the participant suggested that endogenous factors allow for the elevation of the male gender identity and discrimination against women in the workplace. This includes employment opportunities, empowerment, privileges, and job security in the civil service. Examples are narrated in the excerpts below.

*...I was denied employment into the...because they thought such opportunities were meant for men... (FP9)*

*...A woman cannot stay late at work with her male boss...because everyone...would say that she is having a secret affair with him... (FP15)*

*...we still have both men and women directors and heads...who intentionally want to work with only men and would always choose men over women... (FP22)*

Masculinity (commonly associated with men's biological traits) is a culture in Nigeria that emphasises the role of men and their superiority over women. Women are "gender socialised" (orientated) to see themselves as supports and subordinates to men. They are not given fair opportunities and privileges to participate and contribute as much as men, and they face unfair criticism for working very closely with their male counterparts. At times they are stigmatized with negative terms and social labels when they are deemed more successful than their peers.

### **C. Exo-endogenous factors**

The exo-endogenous factors comprise three main factors and five sub-factors. These main factors are as follows:

- i) Sex appeal/sexual exploitation as a criterion for employment.
- ii) Marriage and childbearing - which imply availability for interstate transfers/training, and work flexibility.
- iii) Culture/traditions are categorised into superiority syndrome and breadwinner syndrome from families' and employers' perspectives.

With a consistency rate of 66.7%, 100% and 69.1%, respectively (Appendix B2), the participants suggested that the three main factors above create employment discrimination against women in their workplace, as cited in the excerpts below.

*...we men are very spoilt, just because women have "companies"<sup>8</sup> that can never fail...may decide to select the woman over the man or any other woman... (MP10)*

*One of the factors affecting women's employment is marriage, and pregnancy...that is why preference is given to men... (FP13)*

*...our culture where men are masters and women are expected to be in the kitchen...our president said, women's office is next to the restroom.... (FP25)*

These discriminations reduce women's career advancement, dignity, employment access/opportunities and security. Based on the excerpts above, women are not given equal support from their families and the civil service administration.

### **Identifying gender disparity issues**

The study presents gender disparity issues from two perspectives, systemic and individual-driven gender disparity issues. These are classified based on the identified exogenous and endogenous factors in the previous section. The first is the level of discrimination linked to the civil service hiring and employment strategy. The second one is based on individual relations and assessments in employment.

#### **A. Systemic gender disparity**

The systemic form of gender disparity consists of two main categories and four subcategories. The first is gender disparity in recruitment, and the second is a glass ceiling<sup>9</sup> and portfolio management<sup>10</sup>. While the former has no subcategories, the latter is further decomposed in gender disparity in career progression (86.67%), skill management (81.25%), development opportunities (60%), and employment portfolio (85.71%).

With a consistency rate of 94.20%, the participants responded that discrimination against women in the Nigerian civil service recruitment process is an ongoing issue that impedes women's employment opportunities. Women find it difficult to gain employment in the civil service as they only comprise 30% to 35% of total civil service employment, as indicated in the excerpt below.

*...men are about 65 to 70% of the total civil service employment...There has never been a time when the civil service employed more women than men... (FP25)*

---

<sup>8</sup> Ability to provide sexual pleasure.

<sup>9</sup> In the Nigeria civil service, glass ceiling is a form systemic discrimination that limits mostly qualified women's opportunities to advance within the hierarchies of the various ministries and parastatals.

<sup>10</sup> Portfolio management refers to the level of discrimination in aligning women's skills, experiences and qualification to roles that are appropriate for them.

The participants, with a consistency rate of 80.95%, revealed that the civil service undermines women's potential by imposing a glass ceiling and discrimination in portfolio management. In summary, both the female and male participants made it clear that men are given better employment opportunities with stronger decision-making roles and positions of authority that matches their qualifications. Women at times were relegated to minor decision-making roles and experienced mismatch in the fields of their expertise as expressed in the excerpts below.

*...Women do not go further beyond their initial duties... Some women may stay in a role for their entire tenure in the service even though they get promoted or they finish their training course...(FP18)*

*... And even though there are women, most of them are in roles that are the complete opposite of their area specializations...(MP14)*

*...if a man has to climb 10 stairs to get to where he wants to go, a woman will need to climb 20... we are mostly underrated... (FP18)*

*...we only have 2 women as directors and the rest are all men, say about 16 plus...Are you telling me that all the women died or resigned...(FP25)*

Gender discrimination has indeed distorted the pool of human capital as women were not able to contribute to their fullest and optimal potential. Another way to interpret the finding is that the role of women is primarily to provide support in ensuring the success of men in their careers.

### **B. Individual-driven gender disparity issues**

This form of gender discrimination is broken into one main and four subcategories. The main category is ego and non-compliance with regulations<sup>11</sup>. The other four subcategories are bullying of women (61.90%), inter-gender conflict (61.11%), sexual harassment (66.67%) and victimisation of women (80%).

With a consistency rate of 73.33%, the participant explained that the values of a patriarchal society are well vested in the Nigerian civil service. These values reinforce men's perception (or ego) that they are superior to women. This is exacerbated by the lack of enforcement of gender discrimination policies within the civil service and thus allowing men to exercise certain levels of authority over women. Some put constraints on their women counterparts to gain leverage in their career progression. This is shown in the following excerpts on the individual-driven gender disparity issues below.

---

<sup>11</sup> Ego and non-compliance to regulation is a situation where superordinate in the civil service would implement their personal agendas and SOPs rather than following or abiding to the regulations of the civil service.

*...they will intimidate you because...or makes people question their trustworthiness... (FP24)*

*...Sexual harassment is a big problem for women...it becomes a serious case for you... (FP13)*

*...I have seen an instance when a man rebuke having a woman as a leader...they will make her life difficult, trust me... (FP24)*

The narratives showed that women are bullied, suppressed, and sexually harassed by their superordinate peers. Their contributions are unappreciated, leaving them demoralized and demotivated. This is why many women left before they reached their full potential. These forms of gender disparities are imposed by individuals for personal reasons.

### **Forming conjectures/conclusions: gender inequality nexus**

The gender inequality nexus is the outcome of the qualitative study. Linking gender disparity issues women experience in the civil service to the factors contributing to it using a within-method triangulation technique. The study identified several conjectures depicted in figure 2 below and discussed the findings thematically.

The nexus between A, B and C (the gender disparity issues women experience in the civil service) and the numbers 1 to 7 (the factors in which gender inequality strives) were inductively identified based on the consistencies in the participants' narratives.

#### **A. The deficit in education<sup>12</sup>**

The participants' narratives suggested that a deficit in education is the reason women struggled in components A and B. They highlighted the intrinsic role education play in the preparation and availability of women for employment. In Nigeria, particularly in the north, women do not have equal access as men to education, and as a result, they are not well-equipped with the required skill set to compete with men. Thus, allowing women to be discriminated against in recruitment, limiting their opportunities to break the glass ceiling and secure a better employment portfolio.

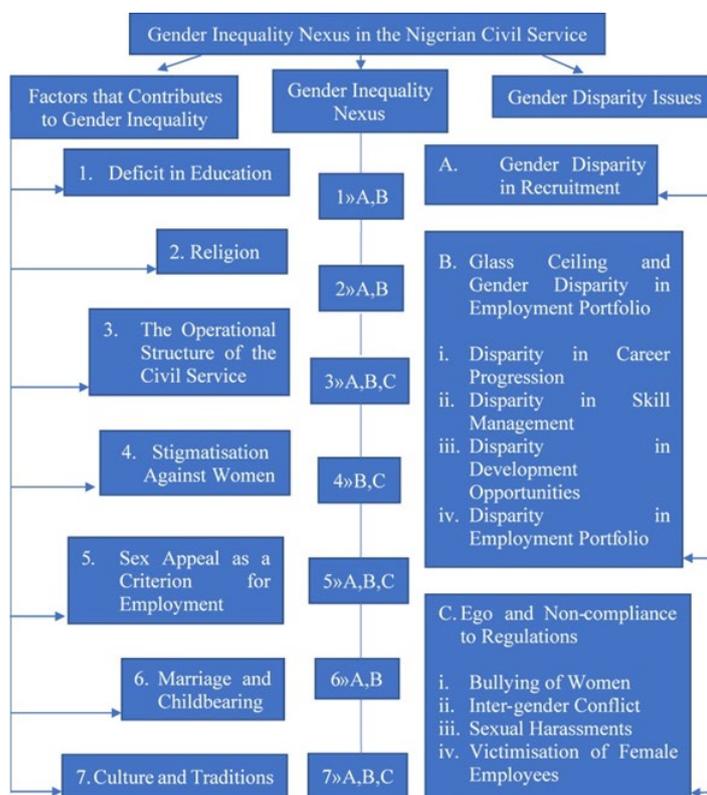
#### **B. Religion**

Religion was also linked to components A and B. The participants' responses showed that religious text strongly justifies and positions men as women's superior, heads of families, spiritual

---

<sup>12</sup> Deficit in education can easily be a subfactor of culture and religion but we presented it as a factor on its own in this study.

leaders, and leaders of social groups/tribes. Women, on the other hand, are put in supporting roles such as that of a housewife. While a lot has changed and the interpretations have evolved, some practices persist. Religion in the Northern part of Nigeria deprives women of social life and formal employment benefits. It moderates their role and influence in society.



**Figure 2.** The gender-inequality nexus.

**C. The operational structure of the civil service**

The participants perceived this component as a factor responsible for components A, B and C. They explained that the structure of civil service employment is biased towards men. It encourages male participation and treats masculinity as men’s biological trait. Therefore, it recognises men as the preferred employees. As mentioned earlier, this allows them to obtain more employment opportunities and thus impedes the progress of female participation.

**D. Stigmatisation against women**

The participants' response shows that negative assumptions and stigmas about women’s sexual morality and fidelity create the environment for components B and C to thrive. It creates a toxic

working environment where women have to monitor themselves to avoid being called derogatory terms. This affects their work efficiency and performance because some of the jobs are important to them, and the negativity affects their personal lives (marriages and social status).

#### ***E. Sex appeal/exploitation as a criterion for employment***

Factors 3, 5, and 7 have more relevance to female labour participation. It revealed that decision-making on employment is over-dominated by some men who make questionable hiring and administrative decisions. This factor does not affect every woman's opportunity and experience in employment, but it encompasses all the gender disparity components (A, B and C, see Figure 2). Some female respondents also attributed their lack of career advancement to standing up against sexual harassment. The other silent few are willing to quit their jobs to avoid the repercussions.

#### ***F. Marriage and childbearing***

A woman's career path is impeded due to structural failures that allow systemic restriction on women in the civil service. For example, the ability to resume service after maternity leave is often factored in as an employment criterion. Marriage and childbearing provide favourable conditions for components A and B, as suggested by the participants. However, some women also opted to leave their service due to family obligations (individual factors) which may not be due to the structure of civil service.

#### ***G. Culture and tradition***

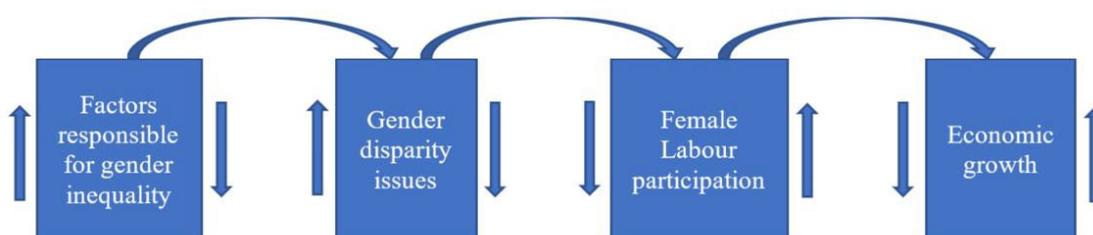
The participants' narratives suggested that components A, B and C manifest in the civil service because of culture and tradition. The findings show that despite Nigeria's proclaimed commitment to a non-discriminatory decree in section 2 of the 1999 constitution, the civil service is yet to achieve gender equality in recruitment and employment. The discriminatory culture that is based on gender has continuously prevailed within the walls of the civil service.

The next section integrates the findings from the gender inequality nexus (qualitative analysis) with the finding from panel data regression (quantitative study).

### 4.3 Triangulation: combining findings from quantitative and qualitative sections

The constraints imposed by gender inequality in the Nigerian civil service and on economic growth stem from exogenous, endogenous, and exo-endogenous factors. While the exogenous factors distort the pool of human capital available for employment, it affects the quality of the female labour force and their participation, therefore eliminating the benefits of perfect competition in the labour market. The results showed that gender biases are in favour of men's employment irrespective of their capabilities and competencies, thus, men with lesser capabilities have better chances than women with better qualifications. The effect of the endogenous factors is more on women's career prospects, empowerment, and ability to realise their potential. The civil service is not fully utilising and benefiting from the pool of human capital and resources available to it.

The underlining theory from the triangulation exercise can be seen in Figure 3 below.



**Figure 3.** Gender inequality and economic growth causal relationship

Examining the left arrows of Figure 3, our theory states that when the factors responsible for gender inequality increase, it will also promote gender disparity. This, in return, will negatively impact female labour participation in the civil service and further affect economic growth negatively. Conversely, when there is a decrease or decline in the factors responsible for gender inequality via policy measures, the gender disparities will decrease, thereby improving women's participation and experience in the civil service and, overall, increasing economic growth.

In detail, the empirical study shows that when female labour participation in the junior cadre increases, economic growth also increases. However, when less capable men are employed at women's expense, it would negatively impact economic growth<sup>13</sup>. Although the contribution of female labour participation to economic growth is positive, it is at a low rate compared to the necessitating percentage increase in the women's workforce. Findings from the interview show that women are not allowed to explore their potential actively and fully, they are relegated to background work, and not given equal opportunities to develop themselves and earn as much as men. This results in some women being demotivated, oppressed and relegated to less impacting

<sup>13</sup> The findings in the qualitative study under The Operational Structure of the Civil Service on page 24 showed that men are given more employment than women as a result of their gender and misconception of masculinity and femininity together with the result on gender inequality from the quantitative study on page 13 to 19. This result is then compared to the findings in the quantitative section where female labor participation increases economic growth. Therefore, by transitive property, we arrive to the aforementioned conclusion.

roles in the civil service. This will make them leave the labour market, hence reducing female labour participation. Again, this negatively affects economic growth.

An important caveat from the empirical study is that only women in the junior cadre have statistically contributed to economic growth. This, however, does not mean women in the senior cadre did not contribute. Qualitative findings suggest that women may get promoted, and receive an increment in income, but do not experience significant changes in their job functions. They are still discriminated against and positioned in roles lower than their expected level of job functions. Factoring in incidences of sexual harassment and family obligations, the cycle repeats as they leave their employment due to demotivation and, thus, are unable to realize their full potential in contributing to economic growth within the civil service.

## **5. Conclusion and recommendations**

The study employed explanatory sequential mixed-mode methods to investigate the impact of gender inequality in the Nigerian civil service on the economic growth of Nigeria. Panel-data estimation was used to examine the link between gender inequality and economic growth, while qualitative analysis accounts for additional dimensions of gender inequality that were not accounted for in the empirical model.

The study found that although an increase in female labour participation would positively impact economic growth, gender inequality would negatively impact economic growth. With systemic and individual-driven gender-based discrimination in effect, women are unable to participate and contribute as much as they would to economic growth. The gender inequality nexus showed that the operational structure of the civil service, sex appeal/exploitation as a criterion for employment, and culture and tradition impose higher challenges on female labour participation.

To manage and mitigate the negative effects of gender inequality in the civil service, the study recommends that the government of Nigeria go after the root of the problem by putting in place a well-coordinated policy framework that will continuously encourage female education and ensure women's employment security. Empowering women through formal education is important. Having gender-sensitive school curriculums also helps mitigate the issues of gender inequality in the long run - since the study shows that the deficit in education constitutes a condition in which inequality thrives. It should ensure that women are particularly aware of their rights with an emphasis on gender equality while making any form of gender discrimination in employment a punishable offence.

The government should consider outsourcing its recruitment and appraisal processes to a third party, with gender equality being their key performance indicator. Systems enabling women to return to work after maternity leave or employment gap due to family obligations should also be part of the workplace policy. While some factors such as religion, culture and tradition may be

difficult to alter, efforts to ensure a change in mindset can be made through public service campaigns, social media and also academic content in schools and universities.

In the wake of the digitalization phenomenon, women are increasingly being empowered by utilising technology to increase productivity. This aspect was also not captured in this study. The way forward, therefore, is to study enablers of women empowerment in an increasingly digitalized economy. This study also only sheds light on the role of public services in empowering women. The study did not account for women's experiences in other sectors. Constraints on the accessibility of state-level output data and the availability of disaggregated time series data at longer periods made restricted the use of different statistical approaches. Therefore, the study can be extended to other sectors/industries to allow more data to be pooled and used as a controlled variable to allow for more comparative analysis.

## References

- Adegoke, F., Adegoke, O. J. & Oyedele, J. B. (2016). Factors Influencing Women Participation in Home Ownership in Nigeria. *Property Management*, 34(1), pp. 67-78. <https://doi.org/10.1108/PM-12-2014-0053>
- Adenuga, A. A., & Chike, F. O. (2013). The Effect of Internal Revenue Generation on Infrastructural Development. A study of Lagos State Internal Revenue Services. *Journal of Education and Social Research*, 3(2), 419 - 436. <https://doi.org/10.5901/jesr.2013.v3n2p419>
- Agboola, T. O. (2018). Effectiveness of Integrated Personnel and Payroll Information System in Addressing Ghost Worker Syndrome in Nigerian Public Sector. *Global Journal of Human Social Science (H)*, Vol 18, No 2-H. No. 2-H. 2018.
- Ali, M. (2015). Effect of Gender Inequality on Economic Growth. Case of Pakistan. *Journal of Economics and Sustainable Development*, 6(9), 10-10.
- Al-Shammari, N. & Al-Rakhis, M., (2017). Impact of Gender Inequality on Economic Growth in the Arab Region. *Research in Applied Economics*, Macrothink Institute.
- Braunstein, E. (2012). Neoliberal Macroeconomics. A Consideration of its Gendered Employment Effects. UNRISD Research Paper 2012-1, Geneva: UNRISD
- Brummet, Q. 2008. The Effect of Gender Inequality on Growth: A Cross-Country Empirical Study. Honours Projects Paper 88, [http://digitalcommons.iwu.edu/econ\\_honproj/88](http://digitalcommons.iwu.edu/econ_honproj/88)
- Central Bank of Nigeria (2018; 2016; 2015; 2013; 2012; 2011; 2009). Annual Report. Central Bank of Nigeria.
- CIDA (2012). Gender Inequality Issues. New York, CIDA.
- Crestwell, J. W. (2012). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. 4th Ed Boston, MA Pearson.
- Cuberes, D. & Teignier, M. (2016). Aggregate Effects of Gender Gaps in the Labour Market: A Quantitative Estimate. *Journal of Human Capital*, 10(1), 1-32. <https://doi.org/10.1086/683847>
- DFID (2012). *Human Right Approach to School Protection*. Oxford University Press.

- Devadas, S. & Kim, Y. E. (2020). Exploring the Potential of Gender Parity to Promote Economic Growth. Research & Policy Briefs, World Bank Malaysia Hub. World Bank Group.
- Enyew, E. B. & Mihrete, G. A. (2018). Liberal Feminism: Assessing its Compatibility and Applicability in Ethiopia Context. *International Journal of Sociology and Anthropology*.
- Fatile, J. O. & Adejuwon, K. D. (2010). Gender Issues in Human Resources Management in the Nigerian Public Service. *African Journal of Political Science and International Relations* 5(3), 112-119.
- Igbokwe-Ibeto, J., Florence, A., & Osawe, C. (2015). Work Content in the Nigerian Civil Service and its Implication on Sustainable Development. *Singaporean Journal of Business Economics, and Management Studies*, 4(4). <https://doi.org/10.12816/0017706>
- Klasen, S. (2018). The Impact of Gender Inequality on Economic Performance in Developing Countries. *Annual Review of Resource Economics*. <https://doi.org/10.1146/annurev-resource-100517-023429>
- Kpanja K. L. & Umar U. S. (2018). Impact of Gender Imbalance on Civil Service Productivity: Implication for Counselling. *International Journal of Innovative Social Sciences and Humanities Research*, 6(2), 45-51.
- Lofstrom, A. (2008). Gender Equality, Economic Growth and Employment. Swedish Ministry of Integration and Gender Equality.
- Mankiw, N. G. Romer, D. & Weil, D. N. (1992). A Contribution to the Empirics of Economic Growth. *The Quarterly Journal of Economics*, 107 (2), 407-437. <https://doi.org/10.2307/2118477>
- Morrison, A., Raju, D., & Sinha, N. (2007). Gender Equality, Poverty and Economic Growth (Policy Research Working Paper No. WPS4349). Washington DC: World Bank. <https://doi.org/10.1596/1813-9450-4349>
- NBS (2013; 2014; 2015; 2016; and 2018). Statistical Report on Women and Men in Nigeria. National Bureau of Statistics.
- Nienaber, H. & Moraka, NV (2016). Feminism in Management Research: A Route to Justly Optimise Talent. *Acta Commercii*, 16(2), 139-163. <https://doi.org/10.4102/ac.v16i2.417>
- Oboh, S. J., Othman, Z., Kam, A. J. Y. & Jusoh S. (2022). Does Gender Inequality Matter in Employment? A Content- and Consistency-Based Analysis of Female Labour Participation in the Nigerian Civil service. *African Journal of Gender, Society & Development*, 11(2), 79-102. <https://doi.org/10.31920/2634-3622/2022/v11n2a4>
- Oboh, S. J., Othman, Z., Kam, A. J. Y. & Jusoh S. (2021). Gender Inequality Nexus in Employment: A Content- and Consistency-Based Analysis of Female Labour Participation in the Civil Service. *African Journal of Business and Economic Research (AJBER)*, Vol. 16(2). <https://doi.org/10.31920/1750-4562/2021/v16n2a13>
- Oboh, S. J., Kam, A. J. Y., Zarina, O. & Sufian, J. (2019). Gender Inequality and Economic Growth in the Nigerian Civil Service. *International Journal of Innovative Technology and Exploring Engineering*, 9(2).
- Ogunyemi, C. B. (2014). The Configuration of Gender and Identity in Nigerian Literatures. *International Journal of Gender and Women's Studies*, 2(2), 43-59.

- Okongwu, O. (2020). Are Laws the Appropriate Solution: The Need to Adopt Non-policy Measures in Aid to the Implementation of Sex Discrimination Laws in Nigeria? *International Journal of Discrimination and the Law*, 21(1), 26-46. <https://doi.org/10.1177/1358229120978915>
- Oloni, E. F. (2015). Gender Inequalities and Employment in Nigeria Research. Research Gate.
- Otteson, J. R. (2004). *Adam Smith Selected Philosophical Writings*. Library of Scottish Philosophy. Imprint Academic.
- Tong, R. (2014). *Feminist Thought: A More Comprehensive Introduction* 4th Ed. Boulder: Westview Press.
- United Nations Office on Drugs and Crime (2020). *Gender and Corruption in Nigeria*. UNODC Research.
- United Nations Sustainable Development Framework 2018-2030 (2017). Government of Jordan and the United Nations. Ministry of Planning and International Cooperation.

### Appendix A1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
tsr	324	4.1790	0.5630	2.7726	6.0007
jfp	280	1114.95	2592.92	0	30112
sfp	323	1414.25	2940.49	0	24056
djmf	280	681.53	2356.42	-11176	12901
dsmf	323	888.89	3961.03	-8703	44454
sgce	321	39.56	49.9796	0.10	376.4
lp	324	2.37	4.2723	0	38.12

### Appendix A2. Correlation table

Variable	<i>Intsr</i>	<i>lnjfp</i>	<i>lnsfp</i>	<i>lndjmf</i>	<i>lndsmf</i>	<i>lnsgce</i>	<i>lp</i>
<i>Intsr</i>	1.0000						
<i>lnjfp</i>	0.0700	1.0000					
<i>lnsfp</i>	-0.0327	0.4934	1.0000				
<i>lndjmf</i>	0.1701	0.4848	0.4462	1.0000			
<i>lndsmf</i>	0.1405	0.4362	0.5763	0.6091	1.0000		
<i>lnsgce</i>	0.7252	-0.1013	-0.0429	0.0780	0.0665	1.0000	
<i>lp</i>	0.1417	-0.1659	-0.2552	-0.3570	-0.4809	0.1692	1.0000

### Appendix A3. Fixed effects model (robustness check)

<i>Intsr</i>	Coef.	P> t
<i>lnjfp</i>	0.0393	0.083
<i>lnsfp</i>	0.0305	0.172
<i>lndjmf</i>	0.0885	0.294
<i>lndsmf</i>	0.1057	0.346
<i>lnsgce</i>	0.2174	0.000
<i>lp</i>	0.0501	0.021
_cons	2.3272	0.000
No of Obs. 222		Prob>F 0.0000

**Appendix B1. Gender disparity issues consistency table**

S/N	Codes	Participants by Gender		Total Participants Out of 27	Frequency Distribution	
		Female	Male		Proportion	Consistency
1	A1	18	9	27	76/81	93.83%
2	N1	4	1	5	5/15	33.33%
3	A3	15	8	23	65/69	94.20%
4	A4	11	5	16	39/48	81.25%
5	G6	4	3	7	18/21	85.71%
6	J5	6	1	7	13/21	61.90%
7	D4	15	6	21	51/63	80.95%
8	C10	4	1	5	13/15	86.67%
9	J6	9	4	13	26/39	66.67%
10	J7	3	2	5	9/15	60%
11	B8	4	1	5	12/15	80%
12	A10	11	4	15	33/45	73.33%
13	J8	4	2	6	11/18	61.11%

**Code descriptions**

Codes	Description	Codes	Description
A1	There is gender inequality	J6	Sexual harassments
N1	There is no gender inequality	C10	Disparity in career progression
A3	Gender disparity in recruitment	J7	Disparity in development opportunity
A4	Disparity in skill management	J8	Inter-gender conflict
G6	Disparity in employment portfolio	B8	Victimisation of women
D4	Glass ceiling and portfolio management	A10	Ego and non-compliance to regulations
J5	Bullying of women		

**Appendix B2. Factors responsible for inequality consistency table**

S/N	Codes	Participant by Gender		Total Participant out of 27	Frequency Distribution	
		Female	Male		Proportion	Consistency
1	B1	6	5	11	29/33	87.88%
2	B4	11	5	16	39/48	81.25%
3	B5	18	5	23	69/69	100%
4	B6	4	9	13	21/39	53.85%
5	B7	5	2	7	13/21	61.90%
6	B9	4	5	9	22/27	81.48%
7	B10	3	4	7	17/21	80.95%
8	F10	6	3	9	18/27	66.67%
9	E9	4	1	5	10/15	66.67%
10	H2	7	4	11	24/33	72.73%
11	H3	7	5	12	23/36	63.89%
12	H4	5	1	6	11/18	61.11%
13	K7	5	3	8	13/24	62.50%
14	C5	18	9	27	56/81	69.14%

**Code descriptions**

Codes	Description	Codes	Description
B1	Deficit in education	F10	Stigmatisation against women
B10	Religion	C5	Culture and religions
B4	Superiority syndrome	E9	Sex appeal as a criterion for employment
B5	Marriage and childbearing	B9	Femininity
B6	Work flexibility	H2	Interstate transfers
B7	Breadwinner syndrome family perspective	H3	Operational structure of the civil service
K7	Breadwinner syndrome employer perspective	H4	Decisionmakers and employees' preferences

**Appendix B3. Gender inequality nexus consistency table**

S/N	Codes	Participant by Gender		Total Participant out of 27	Frequency Distribution	
		Female	Male		Proportion	Consistency
1	Z1	6	5	11	20/33	60.61%
2	Z2	3	7	7	13/21	61.90%
3	Z3	7	5	12	21/36	58.33%
4	Z4	6	3	9	16/27	59.26%
5	Z5	18	5	23	62/69	89.85%
6	Z6	18	9	27	51/81	62.96%
Z1	Deficit in Education				A & B	
Z2	Religion				A & B	
Z3	The Operational Structure of the Civil Service				A, B & C	
Z4	Sex Appeal as a Criterion for Employment				A, B & C	
Z5	Marriage and Childbearing				A & B	
Z6	Culture and Tradition				A, B & C	