Determinants of Women's Participation in Namibia's Labour Force: A Multinomial Analysis of the 2018 Namibia Labour Force Survey

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Extended Abstract

Background: The participation of women in the labour market is one of the areas that continually receive great interest from researchers in various countries globally, while the integration of women in the labour force is understood by many to be a driving force of sustainable human development (Kayirere, 2018). Klasen and Pieters (2012) stated that women's participation in the labour force can be viewed as a signal of decreasing discrimination and a slight increase in women empowerment, among the economic benefits it carries. The Namibia Statistics Agency [NSA] (2019) defined the labour force as consisting of all persons of either sex who provide the labour supply to produce economic goods and services as defined by the United Nations System of national accounts and balances during a specified time-reference period. Generally, Labour Force Participation (LFP) of the working age population is divided into two major categories, namely, the economically active population and the economically inactive population. The economically active population further splits into the employed population and the unemployed population. The economically inactive population comprises all persons of working age who were not employed and were not available for work because of various reasons such as being full-time learners or students, homemakers, illnesses, disabilities or on early retirement, among others (NSA, 2019).

According to the International Labour Organization [ILO] (2018), the overall global LFP rate was estimated to be about 61.8% in 2018, with a 75.0% rate for men and a 48.5% rate for women, revealing a gender gap of 26.5%, while in the Sub-Saharan Africa region, the women LFP rate in 2018 stood at 64.7% (ILO, 2018) with 35.3% being economically inactive. With an estimated population size of around 2,413,643 people in 2018, about 1,531,967 people were of working age (aged 15 years and above) in Namibia, out of which 803,250 were women (NSA, 2019). Of the working age population, 1,090,153 people (71.2%) were in the potential labour force with women making up 50.9% of the total labour force. However, the LFP rate for men in the country was observed to be about 73.5% while among women it was estimated to be about 69.1% (among which 65.7% were employed and 34.3% were unemployed) (NSA, 2019). Among the women of working age, 30.9% were reported to be economically inactive. Conversely, in 2016, about 66.6% of women were economically active, of which 61.7% were employed and 38.3% were unemployed, while 33.4% were economically inactive (NSA, 2017). In comparison, in 2014, Namibia had a women LFP rate of 66.9% (among which 68.3% were employed and 31.7% were unemployed); while about 33.1% were economically inactive (NSA, 2015). With these highlighted LFP rates, identifying factors that contribute to women's participation in Namibia's labour force is warranted.

According to the existing body of literature worldwide, there are substantial variations in women's participation in the labour force across countries such as various socio-economic and socio-demographic factors (e.g., a woman's age, marital status, education level, place of residence and spousal employment status), as well as other non-proximate variations such as dissimilarities in economic growth of a country, cultural and social norms, exposure to mass media, access to credit services and other supportive services. Although very few studies have been conducted on identifying factors that are associated with the participation of women in the labour force in Namibia, none have been conducted using the national labour force surveys. The only known recent empirical study on women's participation in the labour force done in Namibia was a

study by Mufune (2013) using the Namibia Household Income and Expenditure Survey (NHIES), a national household-based survey that provided information on the income and expenditure patterns of households in the country. While Mufune (2013) used the third NHIES for his empirical study, the latest of its kind in 2013, no other empirical studies were further done using the fourth and current NHIES (i.e., 2015/16 NHIES). In addition, the NHIES provides information on the income and expenditure patterns of households in the country and not necessarily information on the crucial indicators required in assessing the labour market situation in the country which the Namibia Labour Force Surveys (NLFSs) specifically do. It was therefore of profound interest to examine the true nature of women's participation in Namibia's labour force as well as its contributing factors using a national labour force survey instead of a households' income and expenditure survey. This research study will be the first of its kind to use the NLFS as previous related studies only used the NHIES. The identified determinants from this study can further be considered as useful insights in the formulation of plans and strategies to further enhance the participation of women in the labour force of Namibia, while adding value to the body of scientific knowledge on women's participation in the labour market in Namibia and globally.

Aims: The aim of this study was to perform an empirical investigation to identify determinants of women's participation in Namibia's labour force.

Methodology: This study was a quantitative cross-sectional research design of the latest NLFS conducted by NSA in 2018 and a multinomial logistic regression to identify determinants of women's participation in Namibia's labour force. The inclusion criteria for this study were all women of working age (15 years and above) as captured in the 2018 NLFS. The individual women considered in this study were identified from the 2018 NLFS as per the inclusion criteria for this study. The socio-demographic and socio-economic indicators of the women considered in this study were their area location, region, age group (in years), marital status, literacy status, and education level, while the LFP status was defined as per the NSA (2019) labour force framework categories (employed, unemployed and economically inactive). The Statistical Package for Social Sciences (SPSS) software (version 29) and the R-software (version 4.2.3) were used for the data cleaning, variables re-coding and data analysis of this study. The Pearson's chi-square test for association was performed to examine the possible association between LFP status and the socio-economic and socio-demographic characteristics of the women, while a multinomial logistic regression technique was employed to determine the factors associated with women's participation in the labor force as well as their effect, given the nominal nature of the LFP status (employed, unemployed and economically inactive). In this study, the economically inactive category was chosen as the reference category. In addition, since the fitted multinomial logistic model only shows a comparison for the employed versus economically inactive and the unemployed versus economically inactive, the incorporation of an adjacent-category modelling into the fitted multinomial logistic model was done in order to compared the employed category with the unemployed. Significant characteristics from the chi-square tests ($p<0.05$) were used in the fitted multinomial logistic regression model.

Results: A total of 802,754 women were considered in this study as per the inclusion criteria of this study, of which 364,234 (45.4%) were employed, 190,507 (23.7%) were unemployed, while 248,013 (30.9%) were economically inactive. Out of the 364,234 employed women, a higher proportion was from the urban areas (56%), living in the Khomas region (21.8%), aged 30-39 years old (29.3%), never married (51.4%), literate (90.5%) and had senior secondary education (20.3%) as their highest level of education attained. On the other hand, out of the 190,507 unemployed women, a high proportion was from the urban areas (56.5%), 20.3% were residing in Khomas region, aged 20-29 years (49.2%), never married (70.2%), literate (90.1%) and had junior secondary education (44.3%) as their highest level of education attained. Of all the 248,013 economically inactive women, a high proportion of them was from the rural areas (52.5%), with 16.8% residing in Khomas region, aged less than 20 years old (38.4%), never married (70.4%), literate (82.1%) and 35.2% had junior secondary education qualification as their highest level of education attained.

From the association examination, at a 5% level of significance, the women's socio-economic and socio-demographic characteristics such as area of location (p<0.001), region (p<0.001), age group (p<0.001), marital status (p<0.001), literacy status (p<0.001) and highest education level (p<0.001) were significantly associated with their LFP status. The findings from this study showed that women residing in the urban areas (OR=0.869, p<0.001, 95% CI: 0.853-0.885), relative to women residing in the rural areas, had a lower likelihood of unemployment when compared to the likelihood of economical inactiveness. Furthermore, this study found out that women residing in the Kavango East (OR=0.921, p<0.001, 95% CI: 0.885-0.959) and Hardap (OR=0.697, p<0.001, 95% CI: 0.667-0.729) regions, relative to women residing in the Zambezi region, had a lower likelihood of employment when compared to the likelihood of economical inactiveness. When it comes to unemployment, this study found that women residing in the //Karas (OR=0.943, p=0.017, 95% CI: 0.899-0.990), Hardap (OR=0.731, p<0.001, 95% CI: 0.697-0.766) and Omusati (OR=0.711, p<0.001, 95% CI: 0.683-0.740) regions had a lower likelihood of unemployment when compared to the likelihood of economical inactiveness. However, women residing in the Erongo (OR=1.168, p=0.039, 95% CI: 1.008-1.351), Kavango West (OR=1.293, p<0.001, 95% CI: 1.127-1.484), Ohangwena (OR=1.267, p<0.001, 95% CI: 1.111-1.446), Omusati (OR=1.384, p<0.001, 95% CI: 1.210-1.583), Oshana (OR=1.311, p<0.001, 95% CI: 1.146-1.499) and Oshikoto (OR=1.158, p=0.032, 95% CI: 1.013-1.324) regions had a higher likelihood of employment compared to the likelihood of unemployment.

In addition, women aged 20-29 years old (OR=2.469, p<0.001, 95% CI: 2.408-2.532), 30-39 years old (OR=9.045, p<0.001, 95% CI: 8.807-9.289), 40-49 years old (OR=7.768, p<0.001, 95% CI: 7.566-7.975) and 50-59 years old (OR=3.942, p<0.001, 95% CI: 3.847-4.040), relative to women aged 60 years and above, had a higher likelihood of employment compared to the likelihood of economical inactiveness. Similarly, women aged 20-29 years old (OR=1.575, p<0.001, 95% CI: 1.431-1.732), 30-39 years old (OR=2.667, p<0.001, 95% CI: 2.422-2.936), 40-49 years old (OR=2.889, p<0.001, 95% CI: 2.616-3.189) and 50-59 years old (OR=2.255, p<0.001, 95% CI: 2.044-2.487) had a higher likelihood of employment compared to the likelihood of unemployment. Likewise, women who were in consensual union (OR=1.231, p<0.001, 95% CI: 1.147-1.322), relative to women who were separated, had a higher likelihood of employment compared to the likelihood of economical inactiveness, while women who were never married (OR=0.912, p=0.048, 95% CI: 0.832-0.999) and those who were divorced (OR=0.789, p<0.001, 95% CI: 0.702-0.887) had a lower likelihood of unemployment when compared to the likelihood of economical inactiveness. Moreover, the findings of this study showed that women who were literate (OR=1.636, p<0.001, 95% CI: 1.594-1.679), relative to women who were illiterate, had a higher likelihood of employment compared to the likelihood of economical inactiveness. Also, women who were literate (OR=1.438, p<0.001, 95% CI: 1.305-1.584) had a higher likelihood of employment compared to the likelihood of unemployment. Women who had no education (OR=0.200, p<0.001, 95% CI: 0.186-0.216), had primary education (OR=0.254, p<0.001, 95% CI: 0.236-0.273) and junior secondary education (OR=0.288, p<0.001, 95% CI: 0.268-0.309), relative to women who had postgraduate certificate/diploma/degree, had a lower likelihood of employment when compared to the likelihood of economical inactiveness, while women who had completed year 1 or 2 or 3 (OR=0.269, p<0.001, 95% CI: 0.243-0.299) of tertiary education had a lower likelihood of unemployment when compared to the likelihood of economical inactiveness. Similarly, women with no education (OR=0.336, p<0.001, 95% CI: 0.248-0.455), with primary education (OR=0.371, p<0.001, 95% CI: 0.277-0.497) and junior secondary education (OR=0.411, p<0.001, 95% CI: 0.307-0.548) had a lower likelihood of employment compared to the likelihood of unemployment.

Conclusions: The participation of women in the labour force is vital in driving the societal and economic development and enhancement of a country. It is therefore crucial to determine and examine the factors that can hinder women's participation and come up with strategies that can eliminate these barriers and empower women. In return, this will assist in increasing the participation of women in the labour force as well as achieving equality. Area location and education level were among the factors that were observed to be

significant in determining women's participation in the labour force in Namibia. Thus, education can be regarded as a pivotal factor in societal development as well as economic development to use in the improvement of the standard of living and well-being of a society, while the decentralization of governmental organizations should be timely implemented, starting with the sensitization, advocacy and training on the purpose and benefits of decentralization. This will in turn intensify and improve rural and local development, thereby improving the chances of rural women's participation and involvement in the labour force. This also applies to the regions since these urban and rural area locations can be found countrywide within different regions. In addition, policymakers and implementers should look into promoting the legislative frameworks existing within the labour market that focuses on eliminating systemic, institutional and cultural limitations which can negatively influence the access of women into the labour market. These include, but not limited to, the Labour Act of Namibia as well as the Affirmative Action (Employment) Act. Furthermore, it is also recommended that future NLFSs take into consideration obtaining information on women regarding variables such as the number of children they have, the size of their families/households, the employment status of the heads of households, spousal income status as well as the ethnicity and race of these women to allow for scrutiny of these variables in future research studies in order to determine how they may or may not influence the decision of a woman to partake in the national labour force.

Keywords: Namibia, women, labour force participation, employment, unemployment, economical inactiveness

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