DOI: 10.20472/EFC.2023.019.013

PRECIOUS MNCAYI
School of Economic Sciences, North-West University, South Africa

JABULILE MAKHALIMA
North-West University, South Africa

EXPLORING FACTORS THAT INFLUENCE THE EMPLOYMENT OUTCOMES OF FEMALE UNIVERSITY GRADUATES: A SOUTH AFRICAN PERSPECTIVE

Abstract:

The South African labour market has long been known for its discriminatory nature. This remarkable feature stems from a racially divided past that persists even after more than 25 years of democracy. Females, in particular, face some of the highest unemployment rates among all groups in the country. While studies connecting gender to higher education have produced mixed results, it is worth noting that a greater percentage of females in South Africa have earned a bachelor's degree than males, according to the 2021 South African Post-School Education Monitoring Report. Moreover, the graduation rate for females has been consistently higher than for males in the last decade. In fact, females have consistently held higher graduation rates over the last decade. Although the higher education sector in South Africa produces a larger number of female graduates and seems to integrate them into the labour market better, unemployment remains a persistent issue among this group. To better understand the factors impacting employment outcomes for South African female university graduates, this article examines data collected from a database of 559 South African female university graduates. The findings show that age (particularly those under 30 years of age), previous racially disadvantaged background, being single, and a bachelor's degree in humanities are statistically significant factors that generate negative employment outcomes. The study recommends that the South African government and private sector take more active measures to encourage and empower females instead of relying solely on education. While education is important, the unique challenges of the South African labour market make it crucial for graduates to carefully consider their career choices and strive for academic excellence.

Keywords:

Employment outcomes; university graduates; females; female graduates; graduate employment; South Africa

JEL Classification: A23, J01, J16

1 Introduction

Higher education is crucial in enhancing employability and contributing to economic and social development (Adrian, 2017). The successful employment of graduates in their chosen professions holds immense significance (Jackson, 2013). Additionally, higher education offers improved prospects for individuals previously excluded, such as women, from participating in the labour market (Harry, Chinyamurind & Mjoli, 2018). To enhance the employability of graduates, it is essential to develop and nurture employability skills, which can be seen as a valuable investment (Paterson, 2017). However, it is important to note that employability does not guarantee employment but enhances employment prospects and outcomes (Razak, Yusof, Syazana, Jaafar & Talib, 2014).

Gender inequality and discrimination remain significant challenges globally, and South Africa is no exception, evident in various social, economic, and educational spheres, including the labour market (United Nations, 2020). Women face marginalisation in business, the labour market, and politics, with their involvement in decision-making processes, often disregarded (Kiss, 2020). Achieving equality in the labour market is crucial for ensuring decent working conditions; however, women continue to face barriers that limit their access to employment, leading to persistent disadvantages compared to men (International Labour Organisation (ILO), 2017). In addition to facing wage disparities, women often endure unpaid work. They face a prolonged and challenging transition from university to working life, with limited access to information and job opportunities compared to men. Moreover, employers in various countries tend to prefer hiring men over women, further marginalising women in the labour market and increasing their risk of poverty (ILO, 2010).

Over the years, many females have enrolled in higher education at South African universities (Harry *et al.*, 2018). Unfortunately, this increase has been accompanied by a rise in graduate unemployment, with the labour market experiencing an imbalance between the supply of graduates and the demand for their skills (Mncayi, 2016; Harry *et al.*, 2018). The core issue lies in the fact that South Africa has been stuck in a prolonged period of low economic growth since the establishment of democracy in 1994 (Allen, Asmal, Bhorat, Hill, Monnakgotla, Oosthuizen & Rooney, 2021). This failure of the economy to grow and create sustainable long-term employment that can reverse the imbalances brought by apartheid has significant implications for work-seekers. Firstly, prolonged unemployment immediately after graduation has long-term consequences, including substantial and permanent income loss for graduates (Khalifa, 2018). Secondly, unemployment poses a serious issue for South African females undermining the efforts and resources invested in education (Statistics South Africa (Stats SA), 2022a). Although the unemployment rate for graduates is lower than those without education, women workers in South Africa are far more economically vulnerable when compared to their male counterparts, and they continually find themselves in low-skilled and poorly paying jobs (Department of Women, 2015; Mlatsheni & Ranchhod, 2017; Saloshni & Nithiseelan, 2022; Mncayi & De Jongh, 2022). Therefore, the question remains: How are their employment outcomes fair when these women are educated? While several studies have investigated graduate employment outcomes (e.g., Baldry, 2016; Oluwajodu *et al.*, 2015; Mncayi & Dunga, 2016; Van Broekhuizen, 2018), none have exclusively focused on female graduates, highlighting gaps in the literature. Most policy implications tend to prioritise education as a solution for graduate unemployment, despite

unemployment being a predicament regardless of educational attainment. This indicates that education alone is not the sole cause or driver of employment outcomes for graduates, including female graduates. Therefore, it is crucial to explore additional solutions to the unemployment problem. Therefore, it is essential to identify the key factors that contribute to favourable graduate employment outcomes. This is especially crucial for promoting gender equality and enabling women to participate fully in the labour market, thereby contributing to the socio-economic development of South Africa. Consequently, the primary objective of this study is to investigate the factors that influence the employment outcomes of female graduates in a South African university. The rest of the paper is structured as follows: Section 2 reviews the literature on employment outcomes, and Section 3 provides the methodology and statistical tests to be conducted. Section 4 discusses the results, and section 5 concludes the study and provides recommendations.

2 Literature Review

2.1 Overview of female graduate employment in South Africa

There has been significant progress globally in women's employment over the years. Despite the pervasive challenges inherent in the labour force, their contributions have been increasingly recognised and appraised (United Nations Educational, Scientific and Cultural Organization (UNESCO), 2022; International Labour Organisation (ILO) & United Nations Women, 2020). For developing countries like South Africa, women's participation in the labour force is limited. A study by Stats SA (2022c) found that at least 47 per cent of South African women were not economically active, as opposed to 35 per cent of their male counterparts. These findings further indicate that females have the lowest absorption rate at 34.2 per cent compared to males at 43.3 per cent (Stats SA, 2022c). Despite efforts to correct the historical injustices experienced by people of colour in South Africa, internal structures instituted by customs and traditions have made it difficult for women to participate meaningfully in the economy as traditional roles were reinforced by patriarchy (Smit & Tessendorf, 2021). The dawn of democracy, however, ushered in various legislations that fostered gender equality and enabled women to participate in the labour force and empower themselves and their families (Casale, Posel & Mosomi, 2021).

The advent of *'the feminisation of the labour force'* saw birth rates decline with fewer marriages as more females were getting educated. More women were becoming breadwinners in their households, with female-headed households being more pronounced (Casale *et al.*, 2021). A tertiary qualification is said to improve employment prospects (Pitan & Muller, 2020; Makhalima, 2022), and this has been the case in South Africa. Stats SA's (2022b) findings for the first quarters of 2017 and 2022 indicate that individuals with a tertiary qualification had higher employment rates than those with lower education levels (Stats SA, 2022b). Of the 250 000 graduates entering the South African labour force, approximately, 30 per cent can find employment, including those who find themselves underemployed (Goyayi, 2022). Findings by Stats SA (2022b) delineate the disparities between men and women, showing a significant decline in the employment rate of female graduates between the period of 2017 (80.3%) and 2022 (73.6%) as opposed to male graduates during the same period (86.9% and 80.5%, respectively).

Data on the share in the graduate employment levels by gender and field of study for the first quarters of 2017 and 2022 depicts that more male graduates were employed in the fields of

agriculture (63.5%) and physical and mathematical engineering (73.2%) compared to women at 36.5 per cent and 26.8 per cent, respectively (Stats SA 2022b). Contrarily, for the first quarters of 2017 and 2022, more women graduates were employed in the fields of arts/education (67.8% and 84.7%, respectively) and economic and management sciences (61.5% and 52.8%, respectively) compared to men graduates for the same fields (32.2% and 15.3%, respectively; 38.5% and 47.2%, respectively). An invisible glass ceiling persists in the fields of STEM (science, technology, engineering and mathematics), with fewer employment opportunities for women. Similar trends are evident in developed countries such as the United States (US) where, although there has been a noticeable increase in university enrolment by women (58%) in the STEM fields as opposed to men, fewer women graduates secure employment in the STEM fields. Income disparities continue to persist between men and women, particularly in the STEM fields where women were earning +-$15 000 per year less than men for the same jobs in STEM fields (Forbes, 2022).

2.2 Barriers to female employment in South Africa

Despite the progress that has been made towards the emancipation of women and them being afforded increased opportunities to become economic contributors in their respective societies, the prevalence and persistence of socio-economic barriers continue to threaten their chances of participating meaningfully in society (Parliament of South Africa, 2021). Female graduates are equally not sparred. There are a host of barriers to female employment and this study will briefly cover a few of these. Educational attainment remains a challenge in Africa particularly for women who are expected to get married early and fulfil traditional household roles and having to forfeit the opportunity to attain a secondary school education at the least (Khan, 2020). Tertiary education is but a figment for most African women's imagination. Findings by the Organisation for Economic Co-operation and Development (OECD, 2021) reveal that South African females between the ages of 25 and 64 had the lowest tertiary education attainment at 15.8 per cent compared to the OECD member countries (39.7%) The findings further indicate that the majority (52.3%) of South African women only managed to attain a below upper secondary education with only 31.8 per cent possessing an upper secondary school level of education (OECD, 2021).

Apart from financial constraints that prohibit women from attaining higher levels of education, incidents of unplanned pregnancies and family obligations amongst other things were cited as the possible barriers to employment. Women with children are often seen as less competent and less desirable to employ as some employers assume that they would be less committed due to their family obligations (Smit & Tessendorf, 2021). Analogously, pregnancy discrimination is another known barrier to female employment. A study by Bouchoma (2018, cited by Khan, 2020) found that several companies in the Nigerian private sector expect females to sign contracts prohibiting them to conceive for a stipulated period upon being employed. Another study on African American women in the US found that pregnant women felt dissuaded to seek employment out of the fear of being discriminated against and those attending interviews while pregnant assume that the negative outcomes of the interview may have been because of their pregnancies (Mehra *et al.*, 2023).

Women with entrepreneurial and leadership aspirations often face challenges in garnering support as opposed to men, particularly if there is a lack of female representation in their fields (Lawless & Fox, 2013). Gender disparities in accessing finance make it difficult for women to

successfully start their businesses and to further create employment opportunities (Loko & Yang, 2022). The absence of mentorship and networking opportunities are also a stumbling block for women aspiring for leadership roles in private corporations, government institutions or higher education institutions (Dusberg, 2019). Statistics on leadership by the World Economic Forum (2022) indicate that women assumed positions in industries where they were already highly represented, such as the education sector (49%) and non-governmental, membership organisations (54%) and healthcare and care services sectors (46%) to mention but a few. Fewer women assumed leadership roles in industries that are historically male dominated, such as technology (30%) manufacturing (22%) and infrastructure (21%), indicating the barriers that continue to exist in these sectors.

2.3 Existing policies in South Africa to increase female employment

Women workers in South Africa, whether employed in the formal or informal sector, are far more economically vulnerable when compared to their male counterparts, and they continually find themselves in low-skilled and poorly paying jobs (Department of Women, 2015; Mlatsheni & Ranchhod, 2017; Saloshni & Nithiseelan, 2022; Mncayi & De Jongh, 2022). Be that as it may, several policies have been promulgated (see Table 1) in South Africa in an effort from the government's side to increase employment among females in South Africa. It is crucial to acknowledge that despite policies and initiatives promoting gender equality and enhancing female employment in South Africa (Stats SA, 2022b:3; Marimbe, 2023), progress is still ongoing. However, it is important to note that certain writers have contested these claims (e.g. Nhlapo & Vyas-Doorgapersad, 2016; Isike, 2022).

Table 1: Summary of policies to increase female employment in South Africa

Policy	Link to female employment	Source
Employment Equity Act (Act no 55 of 1998)	This is legislation that promotes equality and fair treatment in the workplace. It requires designated employers to implement affirmative action measures, including promoting employment opportunities for designated groups, including women.	Department of Employment and Labour (1998)
Broad-Based Black Economic Empowerment (Act No. 46 of 2013).	B-BBEE is a policy framework that addresses historical imbalances in economic participation. It encourages companies to promote gender equality and women's empowerment by providing incentives and recognition to those that achieve gender equity targets.	Department of Trade and Industry and Competition (2013); Kloppers (2014); Marimbe (2023)
National Development Plan (NDP) Vision 2030	The NDP is a long-term development blueprint for South Africa. It emphasises the need to address gender inequality and promote	National Planning Commission (2012); Commission for Gender Equality (2018)

	women's economic empowerment. It sets goals for increasing women's economic participation and reducing gender wage gaps.	
The Gender Equality Strategic Framework (GESF)	The Gender Equality Strategic Framework (GESF) promotes and protects women's human dignity and rights. All government departments must include the following eight principles in their departmental action plans towards achieving women's empowerment and gender equality within the public service workplace	United Nations Women (2008); Department of Forestry, Fisheries and the Environment (2013)
Women Empowerment and Gender Equality Bill	This bill, which is still being finalised, aims to promote gender equality and women's empowerment and eliminate discrimination against women. It proposes measures to enhance women's economic participation and remove barriers to their employment.	The Republic of South Africa (2013)
Gender Responsive Planning, Budgeting, Monitoring, Evaluation, and auditing framework	This framework aims to introduce a gender lens gradually and systematically within the overall management of public finances. Therefore, gender-specific analysis and instruments must be integrated at all budget cycle planning and fiscal strategy stages, preparation, execution, review, and external control.	Clifton, Tang, Rame, Cele and Radebe (2021)
National Skills Development Plan	This plan was promulgated from the Skills Development Plan (Act 97/1998) and aims to improve skills development and training opportunities for all South Africans, including women. They provide mechanisms for funding and promoting training programmes that address the needs of women and other marginalised groups.	Department of Higher Education and Training (2019)
Sector-specific initiatives	Various industries and sectors in South Africa have developed their initiatives to increase female representation and employment. For	Mining Council South Africa (2020)

	example, the mining industry has the Women in Mining programme, which focuses on recruiting and supporting women in mining-related careers.	

Source: Authors' compilation

Implementation, enforcement, and continuous efforts to address societal and cultural barriers are key to realising the intended outcomes of these policies, as some studies (e.g., Williams 2009; Nhlapo & Vyas-Doorgapersad 2016; Isike 2022) argue that the gap in economic empowerment and participation between men and women in South Africa continues to widen in favour of men. There is a lack of knowledge about gender mainstreaming in most departments and across all public sector levels in South Africa (Public Service Commission, 2007). This has unfortunately invited much criticism, with many studies arguing against the government's approach to gender mainstreaming in South Africa. Marimbe (2023:11), for example, notes that: *"the top-down approach assumes that adding the gender aspect to decision making and policy formulation is enough to improve women's position in society without identifying that it is vital to include them at top level managerial positions. This has negatively affected the capacity and performance of many women in South Africa."* One could argue that many government department officials do not know how to move from policy to action, which affects the implementation of gender mainstreaming in the country, delaying the inclusion of women in active economic participation. As highlighted in section 2.1, females, regardless of their level of education, graduates or not, remain the most vulnerable to unemployment and other forms of underutilisation compared to their male counterparts. The next section of the paper will provide a summary of previous studies done on factors influencing the employment of female graduates.

2.4 Previous studies on factors influencing female graduate employment

This section provides an overview of existing research on the factors affecting female graduate employment. It is important to note that there are relatively scant studies that have focused exclusively on the employment outcomes of female graduates per se. Nevertheless, a few studies highlight micro-level factors that shape graduates' labour market outcomes. In their study, which analysed final-year students' perceptions of factors that affect employability at a rural university in South Africa, Harry *et al.* (2018) found that poor socio-economic status, a poor education system, curriculum issues, the choice of higher education institution and social connections to which the student belongs to affect their employability. The data was gathered using focus group interviews with 30 final-year students.

In a study examining factors that influence graduates' employment in Korea, Heo and Xiaohui (2019) report that gender and majors (field of study) held by graduates seem to affect employment possibilities. In particular, men were more likely to be employed than their female counterparts. Age had no significant effect on employment for either men or women. Contrariwise, findings by the Higher Education Statistics Agency in the United Kingdom found that upon graduating from university, female students have a higher probability of securing employment compared to their male counterparts. However, men who manage to find employment tend to receive higher initial salaries than their female counterparts (Higher Education Statistics Agency, 2015).

Hosain, Mustafi and Parvin (2021) interviewed 360 employers. They found that several factors affect the employability of university graduates in Bangladesh, including skills such as teamwork, communication and problem-solving, personality and academic performance. These findings were reiterated by those of Kanagavalli and Gayathri (2022). In a study investigating factors influencing job attainment in recent bachelor graduates in Australia, Jackson's (2013) research indicated that age had a noticeable impact, with older graduates enjoying an advantage in the labour market. Specifically, for every additional year of age, the likelihood of securing full-time employment increased by 2 per cent for mature graduates.

In a study by Ashraf (2007), using US census data from 1990 and 2000, the factors influencing female employment in male-dominated occupations were examined. The findings indicated that marriage reduces the likelihood of females securing employment in such occupations. Additionally, the study revealed a negative impact of college education on female employment in male-dominated fields. Mncayi and De Jongh (2022) used the fourth quarterly labour force survey to assess factors that determine female employment in both the formal and informal sectors in South Africa. Their findings indicate that the likelihood of women obtaining quality employment opportunities is primarily influenced by factors such as their educational background, geographic location, and racial characteristics. Specifically, the odds of being in informal employment were more than 70 per cent higher for black females than their white counterparts, while age and marital status were not significant predictors. The subsequent section discusses the methodological processes followed in the study.

3 Research Methodology

3.1 Research design and ethics

This study pursued a quantitative research design based on primary data collected through an online survey. The sample frame included graduates, regardless of their age or gender, who had completed at least a diploma or equivalent higher educational qualification at a South African university. The online questionnaire was conducted from June 1 to 30 September 2018. The total number of respondents after data cleaning was 1 072, whereas for this study, the analysis was restricted to only females, regardless of age, which resulted in 559 respondents. Similar studies had similar sample sizes (e.g., Mayekiso & Obioha 2021 – 60; Baldry 2016 – 1175; Mncayi 2016 – 233). The response rate was very low, at less than 2%, and therefore the need to close the questionnaire.

The study's empirical objectives assumed an imperative part in the development of the questionnaire. Questionnaire ideas were also taken from the literature (for instance, from Bonnal, Lira & Addy, 2009, among others). The aim was to ensure that the actual questions were carefully constructed and flowed logically to ascertain less confusion to the respondents. The use of closed-ended questions made it easier for the respondents since this was an online survey rather than a physical one with enumerators. However, at the same time, using open-ended questions allowed us to collect more information that would not have been possible if the study had followed a secondary data/time-series approach. This also simplified the data analysis and interpretation process.

The actual questionnaire had six sections, but for this study, only sections A, B, and C were of interest. Section A entailed demographic information such as gender and age. Section B followed with the respondents' higher education, where they aimed to produce information on the field of study and factors that influenced their study choices. In section C, respondents had to indicate their employment status, i.e. whether they are employed (part-time or full-time) or unemployed.

The questionnaire underwent a thorough peer review to ensure no technical or applicability issues. As argued by Teijlinger and Hundley (2001:289), the importance of pretesting a questionnaire ensures that the right questions are asked to answer empirical objectives correctly and that there is a logical flow to the questionnaire sequence. After the pilot-testing (15 respondents) of the survey, adjustments were made to the questionnaire. This process also confirmed that completing the questionnaire only took fewer than 10 minutes, which is recommended (McDaniel & Gates, 2013). The questionnaire was then presented to the university in question's Research Data Gatekeeper Committee and the Research Ethics Committee, seeking permission to access the graduates through the alumni database. After having followed various ethical procedures, permission to do the study was granted with reference number ****-GK-2018 and the ethical clearance number ECONIT-2017-061 *(** are used to hide the identity of the university in question - the ethical clearance certificates can be provided upon request)*. For ethical reasons and to ensure the privacy of the personal information of the participants, the name of the university where graduates were sourced is not disclosed.

The study complied with ethical principles of academic research where respondents could participate out of their free will and withdraw. Confidentiality was also ensured; all responses were only used for statistical purposes. All this information, including the study's purpose, is in the cover letter with the questionnaire link sent to the respondents through the university's alumni database. Once online via Google Forms, the first page had clear instructions on how the sections should be completed, and upon having read these, the respondents had to provide consent on whether they agreed to complete the survey.

3.2 Model specifications

The data in the study was captured, coded and analysed using the Statistical Package for Social Sciences (SPSS) software, version 27. The first step entailed coding the explanatory variables or possible determinants of employment outcome. Table 1 shows how each of the variables was coded.

Table 1: Variable description

Variable	Description	Coding/dummy
$FOS\,(X_1)$	Field of study	Field of study had three dummy variables. 1=EMS 0=otherwise; 1=Education 0=otherwise; 1=Technology and natural sciences 0=otherwise. Humanities was the benchmark point.
$Race\,(X_2)$	Race	Race was a categorical variable with two dummy variables. 1=Black 0=otherwise;

		1=Other races 0=otherwise; White was the benchmark point.
Age (X_3)	Age of the participant	Categorically defined as 0= adults (35 years and older) and 1=youth (20-34 years)
MOS (X_4)	Mode of study	Mode of study had two dummy variables. 1=full-time 0=otherwise; 1=part-time 0=otherwise; distance education was the benchmark point.
MS (X_5)	Marital status	Categorically defined as 1 = married 0 = not married

Source: Authors' compilation based on collected survey data

Following the data coding, the analysis process commenced with descriptive statistics. After that, a binary logistic regression was used to identify significant determinants of female graduates' likelihood of being unemployed or employed. When many independent factors are provided concurrently to predict membership in either one of the two dependent variable categories, a binary logistic regression analyses the impact of each independent variable (Field, 2018). It uses binomial probability theory in which there are two possible outcomes to forecast (Burns & Burns, 2008). In logistic regression, a logistic transformation of the odds (referred to as logit) serves as the dependent variable:

$$Log\ (odds) = Logit(P) = \left(\frac{P_i}{1-P_i}\right) \quad \text{.....(1)}$$

The error term in the model is not necessary. If we take the above dependent variable and add a regression equation for the independent variables, we get a logistic regression:

$$Logit(p) = \left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_k X_k \quad \text{..... (2)}$$

The relationship between the $logit(P)$ and X is assumed to be linear. In equation 3 below, P can be calculated with the following formula:

$$P\left(\frac{exp\,(\alpha+\beta_1 X_1+\beta_2 X_2+\beta_3 X_3+\cdots}{1+exp(\alpha+\beta_1 X_1+\beta_2 X_2+\beta_3 X_3+\cdots}\right) \quad \text{..... ..(3)}$$

Where:

P = the probability that a case is in a particular category.

exp = the exponential function.

α = the constant (or intercept) of the equation.

β = the coefficient (or slope) of the predictor variables.

X_n = shows the respective categorical variables.

Therefore, the model in this study was expressed as:

$$Logit(p) = Ln = \beta_0 + \beta_1 FOS_1 + \beta_2 Race_2 + \beta_3 Age_3 + \beta_4 MOS_4 + \beta_5 MS_5 \quad \text{.....(4)}$$

Equation 4, therefore, depicts the dependent variable Ln as the probability 1=not employed (unemployed) and 0=employed. The terms associated with X_n were categorical values that were entered as dummy variables (see Table 1).

Before interpreting the results, the chosen model underwent various diagnostic tests to determine its suitability (see Table 2). In evaluating the chosen model's significance, the omnibus tests of model coefficients results show that the model is a significant predictor of the dependent variable. The strength of the association between the independent and dependent variables is based on the Nagelkerke $R^{2,}$ which is .098. Only 9.8% of the variation in the dependent variable is attributed to the model. We, therefore, conclude that while the model is a significant predictor of the dependent variable, it is likely that other independent variables may be significant predictors of the employment outcomes of female graduates in this sample. The tolerance and variance inflation factor values are acceptable, indicating that multicollinearity is not a cause for concern in the model.

Table 2: Results of the diagnostic tests

Omnibus test of model coefficients		**Hosmer and Lemeshow test**	
Chi-square = 332.297	*p*-value = 0.000	Chi-square = 5.117	*p*-value = 0.745
−2 log likelihood = 440.812	Cox and Snell R-squared 0.056	Nagelkerke R-squared = 0.098	
Test for multicollinearity			
(Constant)	**Tolerance**	**VIF**	
Race	.925	1.081	
Age	.976	1.025	
Marital status	.923	1.083	
Field of study	.979	1.022	
Mode of study	.986	1.014	

Source: Authors' compilation from SPSS results

4 RESULTS AND DISCUSSIONS

This section details the results on the demographic characteristics of the female graduates of the university in question and discusses the results of the cross-tabulation analysis. Table 3 illustrates the demographic profile of female graduates at a South African university. Based on the results for race, the previously disadvantaged category, which encompasses black, Asian/Indian and coloured individuals, represents 29.9% of the sample. In comparison, white female graduates comprise the majority of the sampled population at 68.5%. The "other" category (which included Indian and Asian) represents 1.6% of the sampled population. The results on the age category show that the bulk of the sample were those aged 35 and above (36.5%), while the 25 to 29 age category made up 29.2% of the sample.

Table 3: Demographic profile of the sample

Category	Factor	N = 559 (Valid%)	X^2 Sig.	Employment outcome	
				Employed	Unemployed
Race	Previously disadvantaged	29.9	0.001	77.3%	22.3%
	White	68.5		88.8%	11.2%
	Other	1.6		66.7%	33.3%
Age	Youth (20-34)	83.5	0.001	84.4%	86.9%
	Adults (35 years and older)	16.5		17.1%	13.1%
Marital status	Married / living together	49.6	0.015	88.2%	11.2%
	Single / not married	50.4		81.5%	18.5%
Field of study	Economic and management sciences	30.0	0.056	88%	12%
	Humanities	25.2		78.6%	21.4%
	Education	12.1		90.9%	9.1%
	Technology and Natural Sciences	32.7		85.2%	14.4%
Qualifications	Diploma	0.5	0.419	66.7%	33.3%
	Bachelor's degree	30.6		82.8%	17.2%
	Postgraduate	69.2		86%	14%

Source: SPSS results from survey data

Regarding marital status, as shown in Table 3, there is a balanced distribution between the married/living together category and those single and unmarried at 49.6% and 50.4%, respectively. Most female graduates are employed (85%), while only 14.8% are unemployed. The highest number of respondents in the field of study was in technology and natural sciences (32.6%), followed by economic and management sciences (29.9%), humanities at 25% and lastly education at 12%. More than 60% of the female graduates had a postgraduate qualification, followed by those with a bachelor's degree at 30.2%. Lastly, a cross-tabulation analysis was done on the variables to determine any significant differences in employment outcomes based on the variables of interest. All variables, excluding qualifications, assumed significant differences. Table

4 illustrates the binary logistic regression results on the possible determinants that may influence the employment outcomes of female graduates.

Table 4: Binary logistic regression results

Variables	B	S.E.	Wald	df	Sig.[a]	Exp(B)
Field of study (EMS)	-.758	.325	5.434	1	.020*	.468
Field of study (Education)	-.943	.492	3.678	1	.055*	.390
Field of study (Tech & NS)	-.403	.303	1.769	1	.183	.669
Race (previously disadvantaged)	.785	.266	8.734	1	.003*	2.193
Race (Other)	1.151	.752	2.347	1	.126	3.163
Age (youth 20-34)	.214	.362	.352	1	.553	1.239
Study mode (full-time)	-.406	.501	.658	1	.417	.666
Study mode (part-time)	-1.499	.638	5.519	1	.019*	.223
Marital status (married/living together)	.337	.265	1.609	1	.205	1.400
Constant	2.979	1.338	4.959	1	.026*	19.665

Note: *Dependent variable: employment outcome (1=not employed/unemployed 0=employed)*
Predictors: *(constant) age, marital status, race, field of study, mode of study*
Reference categories: *race (white); study field (humanities); mode of study (distance learning)*
a. Significant at 0.1 level of significance.*

Source: SPSS results from the survey data

As the dependent variable, the employment outcome was dichotomously coded as 1: unemployed and 0: employed. The selected significance level was 10%, a regularly used alpha value (Gujarati & Porter, 2010; Labovitz, 1968). The first variable under observation is the field of study, a categorical variable with four categories. The study field of humanities was the reference point. The results for the economic and management sciences (EMS) study field were statistically significant at the selected significance level. They had a negative coefficient of -0.758, indicating that those female graduates with an EMS qualification were less likely to be unemployed. The odds ratio (0.468) further suggests that the odds of this occurring were 0.468 more than those of female graduates with a qualification in humanities.

The second category was education, with a significant p-value of 0.055 and a negative coefficient of-0.943. The beta results imply that female graduates with a qualification in education (e.g., Bachelor of Education) are less likely to fall in the unemployed category. The odds of this outcome were 0.390 higher than for graduates with a qualification in humanities. Technology and natural science is the final category under the field of study categorical variable. Female graduates with a Tech and NS qualification were less likely to be unemployed, as the negative coefficient (-0.403) asserted. The odds ratio further asserts that the odds of this outcome were 0.669 higher compared to graduates in the field of humanities. In their study, Heo and Xiaohui (2019) found that graduating in medicine and nursing, engineering and education increased the possibility of employment among graduates in Korea.

These findings therefore imply that compared to those with lower educational levels, such as just a matric, graduates have better employment prospects and are, therefore, most likely to find employment relative to those with low qualifications. These findings mirror those of Mncayi and De Jongh (2022). In the second Quarterly Labour Force Survey, Stats SA (2019) reported that employment levels seem to rise with the level of education. Even though unemployment levels have increased for all educational levels, they are still lower for graduates than for the less educated. Moleke (2010:84) argues that as the economy changes and industries grow, there is often a considerable impact on the demand for people with higher levels of education, which often increases relative to those with lower levels of education. What has been happening in South Africa is that growth has been driven by the tertiary sector, which often requires high-skilled workers, so this often means that those with low skills or rather low levels of education are often left at the brink of unemployment or even vulnerable employment (Reddy *et al.*, 2016:24).

The second independent variable was that of race, which had three categories, with the white category taking the place of the reference point. The previously disadvantaged category was significant at the chosen level of significance. The results reveal that female graduates who fall within the previously disadvantaged racial group (blacks, coloureds, and Indians) were susceptible to being unemployed, as indicated by the positive coefficient 0.785. The results further show that the odds of this occurrence were 2.193 more likely than for white female graduates. The results for the other category indicate that female graduates who fall under the “other” category were more susceptible to unemployment based on the positive coefficient of 1.151. The odd ratio further reveals that the likelihood of this outcome was 3.163 higher than for those female graduates in the white racial group category. Females have continuously been the most affected by enduring negative employment outcomes compared to their male counterparts (ILO, 2018). Female workers, especially blacks, often experience negative employment outcomes and even if they are employed, according to findings of Branson *et al.* (2019:3) and Stats SA (2021), they are most likely to face substantial hardships in the form of unstable, irregular, and low paid type of employment, depriving them of employment security. Mncayi and De Jongh (2022) reinforce these findings by highlighting that race, particularly for black women, remains a crucial factor in predicting the type of employment they find themselves in and its poor quality.

The third variable was age. The results reveal that female graduates in the youth category (20-34 years) were more likely to be unemployed (B:0.214). At the same time, the odds ratio indicates that the odds of this occurrence were 1.239 higher than that of mature female graduates who were 35 years old and older. These results can be expected as it can be assumed that these were fresh graduates who were most likely actively seeking a job. For young females, the transition to adulthood can be a solitary one as they navigate societal standards that tend to limit their development and employment choices (Verick, 2014:6; Fox, Senbet & Simbanegavi, 2016:10) (*See Mncayi, 2020*) and this is especially true in Africa (Fox & Gandhi, 2021). A study by Husin, Rusli, Kumar and Suppiah (2021) also found that the unemployment rate among fresh graduates in Malaysia in 2020 was considerably high at 27% for the same age cohort (20-24). Young females remain the most vulnerable group in the South African labour market, where they encounter high unemployment rates and low employment levels (Bhorat *et al.*, 2017:2). Age had no significant effect on graduate employment in the study of Heo and Xiaohui (2019) in Korea, and that of Mncayi and De Jongh (2022) in South Africa.

Study mode was the fourth independent variable under observation. The variable had three categories, with distance learning as the reference point. The results show that the part-time mode of study category was significant at the chosen significance level. The results of the B values reveal that female graduates who studied full-time (B-0.406) or part-time (-1.499) had a lower probability of being unemployed. Potential employers may have different attitudes and perceptions towards graduates who studied through distance learning. Mode of study (on-campus versus off-campus) and attendance status (full-time versus part-time) may be important to employment outcomes (Jackson, 2013). Gauvreu, Hurst, Cleveland-Innes and Hawranik (2016) in Falode, Ogunje, Chukwuemeka and Bello (2021) deduce that employers may be wary of graduates who studied through distance learning, particularly in fields that are practically oriented and require consistent training, such as teaching, nursing and stem-related fields to mention but a few. The nature of distance learning, therefore, creates a perception that such graduates may not have been exposed to sufficient training, if at all or may question aspects such as the quality of teaching and learning that these graduates may have been exposed to. Contrariwise, a study by Falode *et al.* (2021:6-7), which was conducted in Nigeria, found that there were instances where employers were receptive to employing graduates who attained a qualification through distance learning alluding to the abilities and skills that they may have attained, such as independent learning and self-discipline. They also found that some employers often send their employees for further training using the distance learning mode because of its convenience. Jackson's (2013) study on Australian graduates revealed that part-time students had higher odds of securing full-time employment than their full-time counterparts. Moreover, individuals who pursued a blended approach to their studies had even greater chances of finding employment.

The final variable was marital status. The variable was dichotomously coded as 1 for married and 0 for not married. The results for the B-value, as depicted by the positive coefficient (0.337), reveal that female graduates who were either married or living together with a partner were more likely to be unemployed. Therefore, the odds of being unemployed were 1.400 higher than those who are single. To better understand this, gender has been linked with marital status or family structure, where literature reveals that a woman's marital status influences her behaviour in the labour market (Angrave & Charlwood, 2015:1503). Unlike single women, family responsibilities may constrain married women's labour force behaviour (De Anda & Sobczak, 2011:622). On the other hand, being married provides additional monetary capital, which may make some married women reluctant to seek employment. Heo and Xiaohui's (2019) research discovered that gender plays a significant role in employment outcomes, particularly in Korea. Their findings suggest that men exert a stronger influence on employment possibilities than women do. In a study done in South Africa, marital status was not a significant predictor of female employment, whether formal or informal (Mncayi & De Jongh, 2022).

5 SUMMARIES AND CONCLUDING REMARKS

This study aimed to analyse factors that influence employment outcomes of South African female graduates, regardless of their age. The study found that among all the variables in the study, only field of study, race and mode of study were statistically significant with employment status. Specifically, female graduates who graduated with at least a bachelor's degree in education and EMS had lower chances of being unemployed compared to those who studied in the field of humanities. Furthermore, female graduates who are white had higher chances of being employed compared to their previously disadvantaged cohorts. Female graduates who studied through

distance learning had an increased probability of falling into the unemployed category compared to those who studied full-time or part-time. The study's findings still indicate that compared to other fields of study, such as education, not all graduates from the humanities get absorbed by the South African labour market, hence their high unemployment rate.

Understanding the dynamics surrounding labour markets has become an imperative point of departure in alleviating social ills such as poverty and inequality. This is true, especially given the rise of other forms of labour underutilisation, which have disguised themselves as employment. With stable and secure employment prospects declining worldwide, females are the most vulnerable and negatively affected. Even though education is said to bring about benefits in the labour market through an increased probability of employment, this study showed that this is not always the case. Graduates need to play their part in their career prospects by ensuring that they not only study in fields regarded as "scarce skills" needed by the South African economy but also are soft skills ready and reduce their unrealistic expectations in their initial entry into the labour market. The South African government also needs to do more to grow the economy to create much-needed jobs and provide more support for females seeking to start their businesses, which will translate into job creation. Labour laws that push for the sustainable employment of more females need to be enforced. One can argue that the laws have not done much to ensure unbiased employment practices towards females. There needs to be an enforcement of quotas in hiring female graduates.

Of course, this study is not without any limitations. Firstly, the sample could be much larger to generalise and accentuate the findings to the South African female graduates. Other variables, such as the employment sector and qualifications, were not significant from earlier analyses, which could be attributed to the low sample size. Future studies can collect more graduate numbers. Data on entrepreneurship or self-employment by female graduates can also be collected to comprehend better the career choices of female graduates outside of being employed in the private or public sector. Other variables such as location, working hours and childcare and how these could potentially influence employment prospects and career choices could also be worth exploring in future research. Females who graduate from universities with a history of privilege can use their institution's reputation to their benefit. However, it should be noted that the current study focuses on graduates from a university with a disadvantaged background. On the other hand, those who did not attend such universities need to recognise the significance of establishing a profile that showcases their accomplishments in both their specialised knowledge and transferable skills. They must actively work towards developing a strong identity as a graduate right from the beginning.

6 References

ADRIAN, M. (2017). Determining the skills gap for new hires in management: Student perceptions vs employer expectations. *International Journal of Innovation Education and Research*. Vol. 5, No. 6, p. 139–147.

ALLEN, C.; ASMAL, Z.; BHORAT, H.; HILL, R.; MONNAKGOTLA, J.; OOSTHUIZEN, O. AND ROONEY, C. (2021). *Employment creation potential, labor skills requirements and skill gaps for young people: A South African case study.* African Growth Initiative Working Paper no. 26. https://www.brookings.edu/wp-content/uploads/2021/01/IWOSS-South-Africa_FINAL.pdf Date of access: 08/06/2023.

ANGRAVE, D. and CHARLWOOD, A. (2015). What is the relationship between long working hours, over-employment, under-employment and the subjective well-being of workers? Longitudinal evidence from the UK. *Human Relations. Vol.* 68, No. 9, pp. 1491-1515.

ASHRAF, M. (2007). Factors affecting female employment in male-dominated occupations: evidence from the 1990 and 2000 census data. *Contemporary Economic Policy,* Vol. 25, No. 1, p. 119-130. https://doi.org/10.1111/j.1465-7287.2006.00022.x

BALDRY, K. (2016). Graduate unemployment in South Africa: social inequality reproduced. *Journal of Education and Work.* Vol. 29, No. 7, pp. 788-812.

BHORAT, H.; LILENSTEIN, A.; LILENSTEIN, K. and OOSTHUIZEN, M. (2017). *Youth transitions from higher education into the labour market.* LMIP report No. 36. Labour Market Intelligence Partnership. https://lmip.org.za/document/youth-transitions-higher-education-labour-market. Date of access: 17/02/2022.

BONNAL, M.; LIRA, C. and ADDY, S.N. (2009). Underemployment and local employment dynamics: new evidence. *The Review of Regional Studies. Vol.* 39, No. 3, pp. 317-335.

BOUCHAMA, N., FERRANT, G., FUIRET, L., MENESES, A. and THIM, A. (2018). *Gender inequality in West African social institutions*. West African Papers, No. 13. Paris: Organisation for Economic Co-operation and Development (OECD) Publishing.

BRANSON, N.; DE LANNOY, A. and BRYNDE, K. (2019). Review of youth labour market research. National Income Dynamic Study (NIDS). https://www.opensaldru.uct.ac.za/bitstream/handle/11090/948/2019_01-NIDSD026-YouthLabour.pdf?sequence=1 Date of access: 18/01/2022.

BURNS, R. and BURNS, R. (2008). *Cluster Analysis.* (*In:* Business Research Methods and Statistics Using SPSS. Sage Publications).

CASALE, D., POSEL, D., & MOSOMI, J. (2021). *Gender and Work in South Africa*. The Oxford Handbook of the South African Economy, November, 734–756. https://doi.org/10.1093/oxfordhb/9780192894199.013.32 Date of access: 07 Jun. 2023.

CLIFTON, R.; TANG, V.; RAME, X.; CELE, P. and RADEBE, N. (2021). Advancing Gender Responsive Budgeting in South Africa. International Monetary Fund. https://blog-pfm.imf.org/en/pfmblog/2021/10/advancing-gender-responsive-budgeting-in-south-africa Date of access: 09/06/2023.

COMMISSION FOR GENDER EQUALITY. (2018). Gender analysis of the national development plan vision 2030. https://cge.org.za/wp-content/uploads/2021/01/gender-analysis-of-the-ndp-vision-2030.pdf Government Printer: Pretoria, South Africa.

DE ANDA, R.M. and SOBCZAK, M. (2011). Underemployment among Mexican-origin women. *The Social Science Journal*. Vol. 48, No. 4, pp. 622-629.

DEPARTMENT OF EMPLOYMENT AND LABOUR. 1998. Employment Equity Act (55/1998). Government Gazette, 19370. 19 October. (Pretoria, South Africa).

DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT. (2023). National Gender Policy Framework. Government Printer: Pretoria (Pretoria, South Africa).

DEPARTMENT OF HIGHER EDUCATION AND TRAINING. (2019). Skills Development Act, 1998 (Act No. 97 Of 1998): Promulgation of the National Skills Development Plan (NSDP). Government Gazette, 42290. 7 March. (Pretoria, South Africa).

DEPARTMENT OF TRADE AND INDUSTRY. (2013). Broad-Based Black Economic Empowerment Amendment Act (46/2013). Government Gazette, 36928. 11 October. (Pretoria, South Africa).

DEPARTMENT OF WOMEN. 2015. The status of women in the South African Economy. Government Printer: Pretoria (South Africa).

DUSBERG, S. (2019). *How women start successful businesses: female entrepreneurs in agriculture*. https://www.waldbesitzer-portal.bayern.de/mam/cms01/landwirtschaft/dateien/femagree_engl.pdf Date of access: 08/06/2023.

FALODE, O. C.; OGUNJE, B. F.; CHUKWUEMEKA, E. J.; and BELLO, A. (2021). Perception and Attitude of Employers toward Distance Learning Graduates in Labour Market: A Case Study of Niger State, Nigeria. *European Journal of Interactive Multimedia and Education.* Vol. 2, No. 1, e02101. https://doi.org/10.30935/ejimed/9348

FIELD, A. (2018). *Discovering Statistics Using IBM SPSS Statistics.* 5th ed. Thousand Oaks: SAGE Publications.

FOX, L. and GANDHI, D. (2021). Youth Employment in sub-Saharan Africa: Progress and Prospects. https://www.brookings.edu/wp-content/uploads/2021/03/21.03.24-IWOSS-Intro-paper_FINAL.pdf Date of access: 12/02/2022.

FOX, L.; SENBET, L.W. and SIMBANEGAVI, W. (2016). Youth employment in sub-Saharan Africa: challenges, constraints and opportunities. *Journal of Africa Economics.* 25, i3-i15.

GAUVREAU, S.A; HURST, D.; CLEVELAND-INNES, M. and HAWRANIK, P (2016) Online professional skills workshops: Perspectives from distance education graduate students. *The International Review of Research in Open and Distributed Learning.* Vol. 17, No. 5, pp.19–28. https://doi.org/10.19173/irrodl.v17i5.2024

GOYAYI, M. (2022). Why tackling graduate unemployment in SA is important for post-covid19 economic recovery. https://ddp.org.za/blog/2022/06/03/why-tackling-graduate-unemployment-in-sa-is-important-for-post-covid19-economic-recovery/ Date of access: 08/06/2023.

GUJARATI, D.N. and PORTER, C. (2010). *Essentials of Econometrics.* 4th ed. Boston: McGraw-Hill.

HARRY, T.; CHINYAMURIND, W. and MJO, T. (2018). Perceptions of factors that affect employability amongst a sample of final-year students at a rural South African university. *South African Journal of Industrial Psychology.* Vol. 44, No. 1, p. 1-10. http://dx.doi.org/10.4102/sajip.v44i0.1510.

HEO, J.E. and XIAOHUI, L. (2019). A Study on the Factors Influencing Graduates' Employment. *Asia-pacific Journal of Convergent Research Interchange.* Vol.5, No.3 pp. 81-89. http://dx.doi.org/10.21742/apjcri.2019.09.09

HIGHER EDUCATION STATISTICS AGENCY. (2015). Destinations of Leavers 2013/14. https://www.hesa.ac.uk/data-and-analysis/publications/destinations-2013-14/introduction Date of access: 09/06/2023.

HOSAIN, M.S.; MUSTAFI, M.A.A. and PARVIN, T. (2021). Factors affecting the employability of private university graduates: an exploratory study on Bangladeshi employers. *PSU Research Review.* Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/PRR-01-2021-0005

HUSIN, N.A.; RUSLI, S.; KUMAR, M.S.G. and SUPPIAH, G. (2021). Unemployment crisis among fresh graduates. *American International Journal of Social Science Research.* 10(1).

INTERNATIONAL LABOUR ORGANISATION and UNITED NATIONS: UN WOMEN. (2020). *Empowering Women at Work*. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---multi/documents/publication/wcms_756721.pdf Date of access: 08/06/2023.

ISIKE, C. (2022). The Value of Re-socializing Boys and Men for Positive Gender Relations to Curb Gender-Based Violence and Femicide in South Africa. (*In* Does the UN Model Still Work? Challenges and Prospects for the Future of Multilateralism (pp. 266-286). Brill.

JACKSON, D. (2013) Factors influencing job attainment in recent Bachelor graduates: Evidence from Australia. *Higher Education.* Vol. 68, No. 1, doi: 10.1007/s10734-013-9696-7.

KANAGAVALLI, G. and GATHRI, M. (2022). Factor Affecting Employability and Hiring Decisions of Arts and Science Graduates: A Study of Employers Perceptions. *Indian Journal of Economics and Business.* Vol. 21, No. 3.

KHALIFA, R. (2018). Enhancing female graduate employment through a women-only professional services firm in an economically remote city. *Journal of Economic and Administrative Sciences.* Vol. 34, No. 1, 36-47.

KHAN, T. (2020). *Young, Female and African: Barriers, Interventions and Opportunities for Female Youth*. https://includeplatform.net/wp-content/uploads/2020/04/Khan-2020-Young-female-and-African-barriers-interventions-and-opportunities-for-female-youth-employment-in-Africa-INCLUDE.pdf Date of access: 05/06/2023.

KISS, M. (2020). Recent trends in female employment. European Parliamentary Research Service. https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/659307/EPRS_BRI(2020)659307_EN.pdf Date of access: 09/02/2022.

KLOPPERS, H. (2014). Driving corporate social responsibility through Black economic empowerment. *Law, Democracy and Development.* Vol, 18, 58-79. https://dx.doi.org/10.4314/ldd.v18i1.4

LABOVITZ, S. (1968). Criteria for Selecting a Significance Level: A Note on the Sacredness of 0.05. *The American Sociologist*. Vol. 3, pp. 220–22.

LAWLESS, J. L., & FOX, R. L. (2013). *Girls Just Wanna Not Run.* https://www.american.edu/spa/wpi/upload/girls-just-wanna-not-run_policy-report.pdf Date of access: 08/06/ 2023.

LOKO, B., & YANG, Y. (2022). *Fintech, Female Employment, and Gender Inequality, WP/22/108, June 2022*.International Monetary Fund. Date of access: 08/06/2023.

MAKHALIMA, J. L. (2022). An Analysis of Poverty in Households Headed by Millennials in South Africa. *International Journal of Economics and Financial Issues*. Vol. 12 No. 6, pp. 38–44.

MARIMBE, F. (2023). Gender Equality in South Africa. B-BBEE and Women Empowerment Towards Economic Development. Available at SSRN: http://dx.doi.org/10.2139/ssrn.4466435 Date of access: 06/06/2023.

MAYEKISO, C. and OBIOHA, E.E. (2021). Features of Graduate Underemployment in South Africa: A Study in Mthatha, Eastern Cape Province. *African Journal of Development Studies,* 11(1).

MCDANIEL, C. and GATES, R. (2013). *Marketing research.* 9th ed. Singapore: Wiley.

MEHRA, R.; ALSPAUGH, A.; DUNN, J. T.; FRANCK, L. S.; MCLEMORE, M. R.; KEENE, D. E.; KERSHAW, T. S. and ICKOVICS, J. R. (2023). "'Oh gosh, why go?' cause they are going to look at me and not hire": intersectional experiences of black women navigating employment during pregnancy and parenting. *BMC Pregnancy and Childbirth*. Vol. *23*, No. 1, pp. 1–13. https://doi.org/10.1186/s12884-022-05268-9

MINING COUNCIL SOUTH AFRICA. (2020). Women in mining - White Paper. https://www.mineralscouncil.org.za/downloads/send/37-position-papers/1218-white-paper-women-in-mining Date of access: 08/06/2023. Government Printer: Pretoria (South Africa).

MLATSHENI, C. and RANCHHOD, V. (2017). Youth Labour Market Dynamics in South Africa: Evidence from NIDS 1-2-3. Research Project on Employment, Income Distribution & Inclusive Growth (REDI 3x3). Working Paper 39. REDI3X3. Cape Town: University of Cape Town.

MNCAYI, N.P. (2016). An analysis of the perceptions of graduate unemployment among graduates from a South African University. *International Journal of Social Science and Humanities Studies. Vol.* 8, No. 1, pp. 67-83.

MNCAYI, P. and DE JONGH, J. (2022). The determinants of female employment in the formal and informal sectors in the South African labour market. *Paper in the Proceedings of the Social Sciences International Research Conference, 19-21 October 2022, Hybrid Conference, e-ISBN number: 978-0-6397-8736-7 (e-book), pages 139-157*.

MNCAYI, N.P. and DUNGA, S.H. (2016). Career choice and unemployment length: a study of graduates from a South African university. *Industry and Higher Education*. Vol. 30, No. 6, pp. 413-423.

MOLEKE, P. (2010). The graduate labour market. (*In* Letseka et al., ed. Student retention and graduate destination: Higher education and labour market access and success. Cape Town: HSRC Press. 87-96).

NATIONAL PLANNING COMMISSION. (2012). National development plan 2030 – Our future, make it work. https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf Government Printer: Pretoria, South Africa.

NHLAPO, T.M.S. and VYAS-DOORGAPERSAD, S. (2016). Human resource provisioning strategy for gender equality within the Department of Correctional Services: The case of Groenpunt Management Area. *Administratio Publica.* Vol. 24, No. 3, pp. 166–182.

OLUWAJODU, F.; BLAAUW, D.; GREYLING, L. and KLEYNHANS, E.P.J. (2015). Graduate unemployment in South Africa: Perspectives from the banking sector. *South African Journal of Human Resource Management.* Vol. 13, No. 1, pp. 1-9.

ORGANISATION FOR ECONOMIC DEVELOPMENT AND CO-OPERATION. (2021). *Educational attainment and labour force status.* https://stats.oecd.org/Index.aspx?datasetcode=EAG_NEAC Date of access: 08/06/2023.

PARLIAMENT OF THE REPUBLIC OF SOUTH AFRICA. (2021). *The Women' s Charter for Accelerated Development*. https://www.parliament.gov.za/storage/app/media/1_Stock/Events_Institutional/2021/19-08-2021_Launch_of_the_Womens_Charter/docs/Womens_charter_for_accelerated_development.pdf Date of access: 07/06/2023.

PATERSON, R. (2017). Lecturer and student perceptions of employability skills at a transnational university. *Qualitative Research in Education*. Vol. 6, No. 3, pp. 241–275.

PITAN, O. S. and MULLER, C. (2020). Students' self-perceived employability (SPE) Main effects and interactions of gender. *Higher Education, Skills and Work-Based Learning*, Vol 10 No 2, pp. 355–368. https://doi.org/10.1108/HESWBL-03-2019-0040

PUBLIC SERVICE COMMISSION. (2007). Gender Mainstreaming Initiative in the Public Service. https://www.gov.za/sites/default/files/gcis_document/201409/gendermainstream0.pdf Date of access: 08/06/2023. Pretoria, South Africa.

RAZAK, M.I.; YUSOF, A.M.; SYAZANA, W.N.; JAAFAR, W.E. and TALIB, A.H. (2014). Factors Influencing Unemployment among Graduates in Malaysia – An Overview. *Journal Of Economics and Sustainable Development.* Vol. 5, pp. 168-173.

REDDY, V.; BHORAT, H.; POWELL, M.; VISSER, M. and ARENDS, A. (2016). Skills Supply and Demand in South Africa. LMIP Publication, Human Sciences Research Council, Pretoria. https://hsrc.ac.za/uploads/pageContent/7429/LMIP_SkillsSupplyandDemand_Sept2016.pdf Date of access: 14/05/2022.

STATISTICS SOUTH AFRICA. 2019. Quarterly Labour Force Survey: 2019. https://www.statssa.gov.za/publications/P0211/P02112ndQuarter2019.pdf Date of access: 14/03/2023.

STATISTICS SOUTH AFRICA. (2021). Quarterly Labour Force Survey - Q3. https://www.statssa.gov.za/?p=14957 09/06/2022.

SALOSHNI, N. and NITHISEELAN, N.R. (2022). Vulnerability of South African women workers in the COVID-19 pandemic. *Front Public Health.* doi: 10.3389/fpubh.2022.964073.

STATISTICS SOUTH AFRICA. (2022a). South Africa's youth continue to bear the burden. https://www.statssa.gov.za/?p=15407 Date of access: 09/06/2023.

STATISTICS SOUTH AFRICA. (2022b). Women empowerment. Gender Series Volume IX: 2017-2022. Government Printer: Pretoria, South Africa. https://www.statssa.gov.za/publications/Report-03-10-26/Report-03-10-262022.pdf Date of access: 06/06/2023.

SOUTH AFRICA. STATISTICS SOUTH AFRICA (2022c). Nearly half of SA women are out of the labour force in Q2:2022. https://www.statssa.gov.za/?p=15668 Date of access: 07/06/2023).

TEIJLINGER, E. R. and HUNDLEY, V. (2001). The importance of pilot studies. *Social Research Update*, 35. https://sru.soc.surrey.ac.uk/SRU35.html Date access: 12/05/2022.

TESSENDORF, D. S, & SMIT E. (2021). Patriarchy and Unpaid Work as Barriers To Top-Level Female Appointments: Are South Africa's Labour Laws Enough Not To Keep a Good Woman Down? *Journal for Juridical Science*. Vol. 46, No. 1, pp. 111–144. https://doi.org/10.18820/24150517/jjs46.i1.5.

THE REPUBLIC OF SOUTH AFRICA. (2013). Women empowerment and gender equality bill. Government Printer, ISBN 978-1-4850-0121-8: Pretoria, South Africa.

UNITED NATIONS. (2020). World Social Report 2020: Inequality in a rapidly changing world. New York. https://www.un.org/development/desa/dspd/world-social-report/2020-2.html Date of access: 05/03/2022.

UNITED NATIONS EDUCATIONAL SCIENTIFIC AND CULTURAL ORGANISATION, ORGANISATION FOR ECONOMIC DEVELOPMENT AND CO-OPERATION & INTER-AMERICAN DEVELOPMENT BANK. 2022. T*he effects of AI on the working lives of women*. London: United Nations Educational Scientific and Cultural Organisation.

UNITED NATIONS WOMEN. (2008). National Policy Framework for Women's Empowerment and Gender Equality. https://evaw-global-database.unwomen.org/en/countries/africa/south-africa/2008/national-policy-framework-for-women-s-empowerment-and-gender-equality--2008- Date of access: 07/06/2023.

VAN BROEKHUIZEN, H. (2018). Graduate unemployment and Higher Education Institutions in South Africa. *Stellenbosch Economic Working Papers No 08/16.* University of Stellenbosch. https://resep.sun.ac.za/wp-content/uploads/2018/07/wp-08-2016.pdf Date of access: 06/02/2022.

VERICK, S. (2014). Female labour force participation in developing countries. https://wol.iza.org/uploads/articles/87/pdfs/female-labour-force-participation-in-developing-countries.pdf Date of access: 12/05/2022.

WILLIAMS, S. H. (Ed.). (2009). *Constituting equality: Gender equality and comparative constitutional law.* Cambridge University Press.

WORLD ECONOMIC FORUM, (2022). *Global Gap Report*. https://www.weforum.org/reports/global-gender-gap-report-2022/in-full/2-4-gender-gaps-in-leadership-by-industry-and-cohort/ Date of access: 09/06/2023.