Article

Risk Factors Associated with Hopelessness among Unemployed Graduates during the Covid-19 Lockdown in South Africa

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Abstract

Hopelessness is defined as having a pessimistic expectation of the future and the belief that goals are unachievable. It is reported to be high among the unemployed. During the Covid-19 pandemic, unemployment increased, especially among young graduates. Hence, in this study, we aimed to find the factors that contributed to developing feelings of hopelessness in unemployed South African graduates. This study made use of the survey data obtained from the larger Presidential Youth Employment Initiative (PYEI) study. The primary outcome variable was the presence of hopelessness, which was based on Beck's Hopelessness Scale (BHS). The study participants completed a self-administered questionnaire on a data-free online platform within two months of commencement of employment in the PYEI internship programme. The survey data were analysed using Stata 15.0. (StataCorp Texas USA 2016). The prevalence of hopelessness was presented by the independent variables of

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interest. Bivariate logistic regression models were used to investigate the association between the independent variables with the primary outcome of hopelessness. Our study reported that being "not African" was associated with hopelessness and that prolonged social media use protected against developing feelings of hopelessness. Identifying these risk factors is vital in caring for the mental health of South Africans.

Keywords: Covid-19; lockdown; hopelessness; risk factors; South Africa; unemployed graduates

Introduction

Over the past 12 years, the prevalence of hopelessness among people has steadily increased, with variables such as loneliness, gender, unemployment and diagnosis of depression being some of the numerous contributors (Hiswåls et al. 2017; Keshoofy et al. 2023; Padmanabhanunni and Pretorius 2021). Hopelessness is defined as a cognitive state that is characterised by having pessimistic expectations of the future and the belief that goals are unachievable (Mitchell et al. 2020). Early research into hopelessness considered it to be a symptom of depression, while more recent studies argue that hopelessness is a precursor of depression emanating from negative life events and other stressors (Mitchell et al. 2020). This "Hopelessness Theory of Depression" is now widely accepted.

There are many contributing factors to feelings of hopelessness, and one such factor is unemployment (Hiswåls et al. 2017). Globally, multiple studies were carried out highlighting the impact that unemployment has on people. Despite accessing the mental state in a variety of backgrounds, hopelessness due to unemployment emerges as a common theme (Fronek and Briggs 2021; Gisinger et al. 2022; Hiswåls et al. 2017). Prior to the emergence of the coronavirus, unemployment rates in South Africa were already high at 29.1%, which increased to 35.3% during the pandemic, implying that unsuccessful job-seeking prospects were likely exacerbated due to the Covid-19 pandemic and lockdown restrictions (Hlayisi 2022). The youth unemployment rates remain high, which are reported at 59.6% and 40.5% for those between the ages of 15–24 and 25–34 years, respectively (Statistics South Africa 2022). Furthermore, the graduate unemployment rate is quantified at 10.7% (Statistics South Africa 2022). In an economy where employment prospects are constrained, finding employment that is aligned with one's graduate qualifications and a corresponding market-related salary is also difficult. Hence, many unemployed graduates revert to jobs that are not relevant to their study area, or where they are underpaid in order to make ends meet (Pauw et al. 2006).

Regarding hopelessness due to unemployment in the setting of the Covid-19 pandemic, a study carried out in the Western Cape Province of South Africa reported that young adults, particularly females, experience extraordinary levels of psychological distress. In part, this is due to the hopelessness associated with loneliness during the national

lockdown (Padmanabhanunni and Pretorius 2021). The majority of mental health studies focus on urban populations, while Mngoma et al. (2021) saw the need to investigate the Harry Gwala District, a rural area in South Africa. They found high rates of common mental health disorders, along with high drug and alcohol use, which is likely a coping mechanism (Mngoma et al. 2021).

According to the Quarterly Labour Force Survey (QLFS) released by Statistics South Africa, unemployment increased by 0,1 of a percentage point to 29,1% in Q3 of 2019 (Statistics South Africa 2019). This was the highest unemployment rate in the country since Stats SA started measuring unemployment using the QLFS in 2008. In the aftermath of the Covid-19 global pandemic, modelling by the National Treasury predicted that 1.8 million jobs, and perhaps more, could be lost because of the epidemic and the consequences of the national lockdown. The challenges faced by graduates to find employment were, therefore, grave and present very gloomy prospects for young people. The Presidential Youth Employment Initiative (PYEI) through the National Treasury, therefore, committed R100 billion for employment creation as part of an "employment-oriented" adjustment budget that radically reprioritised the resources to ensure that new and urgent demands are met, given the context of the Covid-19 pandemic and a hostile and drastically changed labour market. This study created jobs for 1 000 unemployed graduates in the research and development environment where they were provided the opportunity to work, engage in experiential learning and training, and be mentored and capacitated, especially in the knowledge production space of research and innovation, for 6–12 months.

We propose that graduates with a longer duration of unemployment since graduation, a less than R1 600 total household income, accompanied by a large number of dependants, will contribute to the hopelessness experienced in our cohort of unemployed graduates. Furthermore, lockdown restrictions brought about in aid of reducing the spread of coronavirus cannot be overlooked. The baseline data collected from the graduates enrolled in this PYEI internship programme were used to determine the prevalence of hopelessness and to identify the factors that contribute to hopelessness in unemployed South African graduates during the Covid-19 pandemic.

Methodology

Participants

The study that is reported on in this article was part of the larger PYEI initiative where 1 000 unemployed graduates were employed by the Human Sciences Research Council (HSRC) as part of their experiential learning internship programme during the Covid-19 lockdown. Participants were between the ages of 18 and 35, were South African citizens and resided in the country, were unemployed, with a higher education certificate (degree or national diploma) in the following areas of study: humanities and social

sciences; arts; education; geography; public health administration; commerce; information technology; and sciences, including health sciences.

Instrument

The primary outcome variable was the presence of hopelessness, which was based on Beck's Hopelessness Scale (BHS). BHS is a 20-item scale used to quantify feelings of hopelessness in psychiatric and non-psychiatric patients. It comprises nine false and 11 true statements. A response to each statement was assigned a score of either 0=false or 1=true, and the sum of the responses tallied the individual's hopelessness score. Sum scores of 4–8, 9–14 and 15–20 indicate mild, moderate and severe hopelessness, respectively, and a score of 0–3 can be considered no or minimal hopelessness (Beck and Steer 1988). The sum scores were further dichotomised into a binary variable where scores of >=4 indicated some level of hopelessness, and scores of 0–3 indicated no/minimal hopelessness.

The independent variables investigated in this study were informed by a review of the literature on factors associated with hopelessness and poor mental health. The independent variables were categorised into demographic characteristics (gender, age group, race, whether or not the participant was on chronic medication or had a disability); study profile (year of graduation, field of study); work-related variables (having ever been employed in a formal job since graduation and agreeing that the Covid-19 restrictions had made it difficult to find a job); socioeconomic variables (dwelling type, household income category, number of financial dependants); and social media use (number of hours spent on social media per day). Race was reported as per Statistics South Africa's standard population groups (Statistics South Africa 2022). Due to small numbers of participants who identified as White, Coloured, Indian/Asian, or preferred not to say, these categories were combined into a single group (Not African), so that race was categorised as "African" and "Not African." The question on field of study allowed participants to select more than one response from a range of study fields. The responses were categorised into binary variables for each of the disciplines of natural sciences, social sciences and business administration.

Procedure

The study participants completed a self-administered questionnaire on a data-free online platform within two months of commencement of employment into the PYEI internship programme. The questionnaire was developed within the Research.NET online platform. Due to the geographic and procedural complexity of conducting in-person interviews, the online platform was adopted to enable efficient data capture.

Ethical Considerations

Ethical approval for this study was obtained from the Research Ethics Committee (REC) of the South African Human Sciences Research Council (HSRC) (REC number: REC 3/25/11/20). Prior to completing the questionnaire, all participants were provided with

an electronic study information sheet and consent form. Online informed consent was obtained from all respondents in the study via a tick-box. If no consent was obtained, the respondent was thanked for their time and exited from the online questionnaire. All information gained was considered confidential and treated as such. Counselling support to graduates was offered by the HSRC's Employee Assistance Provider (EAP) after completion of the assessment and for the duration of the internship.

Statistical Analysis

The survey data were analysed using Stata 15.0. (StataCorp Texas USA 2016). With regard to the sample demographics, under gender, "other" was categorised as those who identified as transgender or preferred not to say. The prevalence of hopelessness was presented by the independent variables of interest. Bivariate logistic regression models were used to investigate the association between the independent variables with the primary outcome of hopelessness. The results are represented as % [95% CI], n, as well as odds ratio and 95% CI(OR). A $p<0.05$ was considered statistically significant.

Results

Sample Demographics

Table 1 presents the characteristics of the sample (n=850). Two-thirds of the participants (67.4%) were female, just over half (53.6%) were between the ages of 25–29 years, and the majority were African (96.7%). Half of the study population (50.5%) graduated during 2019–2021, while 12.1% graduated before the year 2016. Over half (56.5%) of the participants reported that they had not been employed since graduation, and the majority (90.9%) agreed that the coronavirus lockdown restrictions had made it difficult to find a job. A fifth of participants reported their household income at <=R1600 per month, while slightly over a quarter (26%) reported the monthly household income at between R3 201 and R6 400. Over a third (36.5%) of participants had no financial dependents, and 37.2% had between one and two dependents. The majority (74.6%) lived in a formal dwelling, and 6.1% reported having a disability or being on chronic medication. Three in five participants (60.8%) reported that they spent between 1–4 hours on social media per day, while 23.1% reported more than four hours per day.

Table 1: Sample demographics

	n	%
Gender	850	100
Female	573	67.4
Male	262	30.8
Other	15	1.8
Age	850	100
20–24 years	249	29.3
25–29 years	456	53.6
30–35 years	145	17.1
Race	852	100
African	824	96.7
Not African	28	3.3
Year of graduation	849	100
2019–2021	429	50.5
2016–2018	317	37.3
<2016	103	12.1
Area of study		
Natural Sciences	172	19.28
Social Sciences	347	38.90
Business Admin	393	44.06
Other	58	6.5
Have you been formally employed since graduation?	852	100
Yes	371	43.5
No	481	56.5
Did the coronavirus lockdown restrictions make it difficult to find a job?	850	100
Yes	773	90.9
No	77	9.1
Household income (Rands per/month)	846	100
≤ 1600	169	20
1601–3200	120	14.2
3201–6400	220	26
6401–12800	131	15.5
> 12800	100	11.8
Don’t know/prefer not to say	106	12.5
Number of financial dependents	849	100
None	310	36.5

Table 1: Sample demographics		
	n	**%**
1–2	316	37.2
≥3	223	26.3
Dwelling type	850	100
Formal	634	74.6
Informal	103	12.1
Room in a backyard	113	13.1
Disability or on chronic medication	852	100
Yes	52	6.1
No	800	93.4
Number of hours spent on social media	851	100
0–1 hour	137	16.1
>1–≤4 hours	517	60.8
> 4 hours	197	23.1

Hopelessness and Associated Factors

Overall, 13.8% of participants (14.5% of females and 11.8% of males) experienced hopelessness (table 2). The prevalence of hopelessness was lower among African participants (13.3% [95% CI: 11.2–15.9]) than those of other race groups (28.6% [95% CI: 15.0–47.6]). Participants who were on chronic medication or had a disability (21.2% [95% CI:12.1–34.3]) and spent less than one hour a day on social media (20.2% [95% CI: 14.5–28.0]) had a high prevalence of hopelessness (table 2).

Table 2: Prevalence and risk factors associated with having hopelessness

	Hopelessness % [95% CI]	Odds Ratio	95% CI(OR)	p-value
Gender	**13.9 [11.7–16.4]**			
Female	14.5 [11.8–17.6]	ref	-	-
Male	11.8 [8.4–16.3]	0.79	[0.51–1.23]	0.301
Other	26.7 [10.4–53.4]	2.15	[0.67–6.9]	0.2
Age	**13.9 [11.7–16.4]**			
18–24 years	12.0 [8.5–16.7]	ref	-	-
25–29 years	15.1 [12.1–18.7]	1.3	[0.82–2.06]	0.261
30–35 years	13.1 [8.5–19.6]	1.1	[0.6–2.04]	0.76
Race	**13.8 [11.7–16.3]**			
African	13.3 [11.2–15.9]	ref	-	-
Not African	28.6 [15.0–47.6]	2.6	[1.12–6.04]	0.027
Year of graduation	**13.9 [11.7–16.4]**			
2019–2021	14.2 [11.2–17.9]	ref	-	-
2016–2018	14.8 [11.3–19.2]	1.05	[0.7–1.58]	0.816
< 2016	9.7 [5.3–17.1]	0.65	[0.32–1.31]	0.23
Area of study				
Natural Sciences	13.1 [8.8–19.1]	0.92	[0.56–1.52]	0.752
Social Sciences	13.6 [10.3–17.8]	0.97	[0.65–1.45]	0.886
Business Admin	13.3 [10.2–17.1]	0.92	[0.62–1.36]	0.679
Have you been formally employed since graduation?	**13.8 [11.7–16.3]**			
Yes	13.5 [10.4–17.4]	ref	-	-
No	14.1 [11.3–17.6]	1.06	[0.71–1.57]	0.782
Did the coronavirus lockdown restrictions make it difficult to find a job?	**13.8 [11.6–16.3]**			
No	14.3 [8.1–24.0]	ref	-	-
Yes	13.7 [11.5–16.3]	0.95	[0.49–1.86]	0.889
Household income (Rands/Month)	**13.9 [11.8–16.5]**			
≤ 1600	13.0 [8.7–19.0]	ref	-	-
1601–3200	11.7 [7.0–18.8]	0.88	[0.43–1.8]	0.732
3201–6400	16.8 [12.4–22.4]	1.35	[0.76–2.39]	0.301
6401–12800	13.7 [8.8–20.8]	1.06	[0.54–2.08]	0.855
> 12800	16.0 [10.0–24.6]	1.27	[0.63–2.56]	0.498
Don’t know/prefer not to say	10.4 [5.8–17.8]	0.77	[0.36–1.67]	0.513

Table 2: Prevalence and risk factors associated with having hopelessness

	Hopelessness % [95% CI]	**Odds Ratio**	**95% CI(OR)**	**p-value**
Number of dependents	**13.9 [11.7–16.4]**			
None	13.2 [9.9–17.5]	ref	-	-
2–3	14.2 [10.8–18.6]	1.09	[0.69–1.72]	0.712
≥3	14.3 [10.3–19.6]	1.1	[0.67–1.81]	0.71
Dwelling type	**13.9 [11.7–16.4]**			
Formal	14.5 [12.0–17.5]	ref	-	-
Informal	15.5 [9.7–23.9]	1.08	[0.61–1.93]	0.785
Room in backyard	8.8 [4.8–15.7]	0.57	[0.29–1.14]	0.11
Disabled or on chronic medication	**13.8 [11.7–16.3]**			
No	13.4 [11.2–15.9]	ref	-	-
Yes	21.2 [12.1–34.3]	1.74	[0.87–3.49]	0.12
Number of hours spent on social media	**13.7 [11.6–16.2]**			
0–1 hour	20.4 [14.5–28.0]	ref	-	-
>1 to ≤4 hours	13.2 [10.5–16.4]	0.59	[0.36–0.96]	0.034
>4 hours	10.7 [7.0–15.8]	0.46	[0.25–0.86]	0.014

The bivariate logistic regressions showed higher odds of hopelessness among participants from other race groups (odds ratio [OR]=2.6, p=0.027) than African participants. Lower odds of hopelessness were found among participants who spent 1–4 hours (OR=0.59, p=0.034) and >4 hours (OR=0.46, p=0.014) on social media per day compared to those who spent 0–1 hour per day (table 2).

Discussion

The current study found that longer social media use per day significantly protected against hopelessness in unemployed South African graduates. Similar findings were reported by Dang, Zhang, and Nunez (2021) and Shawcroft et al. (2022). It is plausible that lower levels of hopelessness may be attributed to some of the daily stressors, such as in-person school or unwanted social interactions being removed by the Covid-19 restrictions. People are then able to have a better quality and quantity of sleep, resulting in feelings of less hopelessness and improving their mental health state (Dang et al. 2021; Shawcroft et al. 2022). Video chatting was also reported to have a positive effect on feelings of hopelessness and happiness in 2020 during the Covid-19 pandemic compared to pre-Covid-19 times (Shawcroft et al. 2022). Video chat was the platform where learning could take place, but more importantly, it was a method to keep in

contact with family and friends (Shawcroft et al. 2022). Conversely, Chen, Yu, and Cao (2022) found that physical and social interaction reduced pandemic fatigue and hopelessness in their survey inclusive of 849 social media users in China.

We also found that being White, Coloured or Indian/Asian (i.e., not African) was associated with hopelessness. A paper published in 2023 also reported that certain race groups, such as Hispanic/Latinx and Black Americans, out of their entire sample population in six US states, were allied with mental distress (Welton-Mitchell et al. 2023). Brooks et al. (2022) also found significantly varying degrees of hopelessness among participants of different racial backgrounds.

Although females reported a higher prevalence of hopelessness compared to males, gender was not found to be a risk factor associated with hopelessness. Momeni et al. (2023), Epifanio et al. (2023) and Zegarra-López et al. (2022) also reported a higher prevalence of hopelessness among females. Women, more often than not, adopt an emotional-focused coping style as opposed to a problem-focused style used by men, contributing to their increased levels of anxiety and subsequent hopelessness.

A study carried out in a Finnish population found that a poor financial situation, as well as a decreased working ability, was associated with hopelessness (Haatainen et al. 2004). Our study reports that the prevalence of hopelessness in a household with an income of less than and equal to R1 600 or greater than R12 800 was 13% and 16%, respectively. Furthermore, only a marginally lower prevalence of hopelessness was observed in graduates who acknowledged that the coronavirus lockdown restrictions made it difficult to seek employment compared to those who were not hindered by these restrictions.

Other studies also corroborated findings that socioeconomic status is associated with hopelessness (Dang et al. 2021; Zegarra-López et al. 2022). Dang et al. (2021) state that people with lower household incomes exhibit higher levels of hopelessness, while Zegarra-López et al. (2022) found that from the analysis between the wealth index quintiles, decreased levels of depression were found in people from the fifth, i.e., the highest quintile compared to the first, second, third and fourth. Another aspect to consider is the unemployment of parents during the pandemic. It has been reported that parents, especially mothers, had higher rates of unemployment due to their need to care for their children during school closures. When this was met with inadequate support from the government, unemployment quickly translated into extreme hardship for the entire family (Parolin 2020). Zegarra-López et al. (2022) also corroborate our findings of having no association with hopelessness and dwelling type.

With respect to age, the highest prevalence of hopelessness in this study was observed in people between the age of 25–29 years, closely followed by those aged 30–35 years and 20–24 years. Differing results were published, where higher levels of depression were seen in adults 60 years or older (Zegarra-López et al. 2022).

Having studied at the university level is related to having no feelings of hopelessness, irrespective of the year of graduation or area of study, in a South African population. Similar findings were reported in other studies (Guo et al. 2021; Lemuel et al. 2021; Zegarra-López et al. 2022). It is hypothesised that education gives access to a better quality of life through the availability of better job opportunities and a higher socioeconomic status (Organisation for Economic Co-operation and Development 2021; Zegarra-López et al. 2022).

It was found that those who were on chronic medication or had a disability exhibited the third highest prevalence of hopelessness in our population of unemployed graduates. Brooks et al. (2022) also reached the same conclusion. More often than not, those who have a disability or are on chronic medication are at or below the poverty line. These people greatly rely on the government to provide them with much-needed support. During the pandemic, Covid-19-related services became a priority for the government, leaving those who needed chronic medication, or who were disabled, destitute (Brooks et al. 2022), thus justifying their feelings of hopelessness.

Conclusion

Our study reports that being White, Coloured, Indian/Asian was associated with feelings of hopelessness, while spending more time on social media protected against developing feelings of hopelessness in unemployed South African graduates. Identifying these risk factors is vital in caring for the mental health of South Africans.

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