

THE ROLE OF FOOD AID PROGRAMS AT THE UNIVERSITY OF THE WESTERN CAPE FOR POST GRADUATE STUDENTS

Thandokazi Building

University of the Western Cape, South Africa. Email: 2803504@myuwc.ac.za

Prof Abdulrazak Karriem

University of the Western Cape, South Africa. Email: akarriem@uwc.ac.za

Prof Mohamed Sayeed Bayat

Institute of Social Development, University of the Western Cape, South Africa. Email: mbmsaheed@gmail.com

ABSTRACT

Food insecurity is a phenomenon affecting many developed countries, among them susceptible to food insecurity are tertiary students. Food insecurity affects the livelihoods of students and is a global problem. This causes doubt and anxiety which affects the educational outcome of students and losing focus on academic excellence. This study focuses on student food security and the role of campus food aid programs at the University of the Western Cape. Food security is an important aspect of people's lives globally. While food insecurity is a significant challenge experienced by many South Africans nationally. Thus, necessary to shed light on the challenges of food among tertiary institutions and the relevance of food aid programs. The present study employed a mixed method which has provided both significant elements of quantitative and qualitative research methods. A comprehensive review of the literature was employed, this includes both academic literature and grey literature on student food insecurity globally, nationally, and at UWC. Primary data and secondary data were collected to answer the research questions. The quantitative element of this study was conducted through an online questionnaire with thirty postgraduate students. While the qualitative element was conducted semi-structured with ten postgraduate students. Students from low socio-economic backgrounds, without funding, covid 19, and expensive food on campus are some of the main causes of food insecurity. Students experiencing food insecurity have lost interest in their academics, performed less than their potential in academic assessments, some have failed the academic year and dropping out before time. The discontinuation of some food aid programs has increased the demand for food and the need for more food initiatives to be established. The role of food aid programs provided positive results in the alleviating of food insecurity during covid 19 and have proven consistency in the provision of food. This study aimed to bring awareness about the existence of food insecurity among postgraduate students. Stakeholders of the university, policymakers, and researchers must take into consideration the various effects of food insecurity and investigate the alleviation strategies. This prevents the increase in dropping out, students repeating the academic year, and getting an improvement in academic excellence and graduation rates.

Keywords:

food security, student food insecurity, reasons, postgraduate students, the role of food aid programs

Article History:

Received: 11 Jul 2022

Accepted: 14 Aug 2022

Available Online: 15 Sep 2022



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1. INTRODUCTION

Globally, food insecurity is a phenomenon affecting many developed countries such as the United States, Australia, and Canada (Barret, 2010). It is a global issue that affects the livelihoods of individuals nationally and extends to university campuses. South Africa is food secured nationally and has the capability of producing and importing food that meets the basic needs of its population. While households are faced with challenges of accessing adequate food (Du Toit, 2011). In South Africa, food aid programs are more prioritized in rural and poor communities and as part of school feeding programs (Munro et al (2013). Tertiary food security is not prioritized as much as high school level. While students who have been benefiting from primary and secondary school feeding programs are affected by food insecurity at university unless food aid programs are made available to them. (Gwacela, 2013). Students that experience food insecurity is most likely to be coming from low-income households (Sabi, 2018). Researchers found that university students are not immune to this global phenomenon. Section 26 of the Bill of Rights confirms the position of the food aid programs in tertiary institutions, whereby all individuals have the right to adequate food, water, and security (RSA,1996). This prompted universities across the world to introduce student food aid programs in response to student hunger and food security-related issues. These issues include academic failure, increased drop-out rates, and graduation retention. The acknowledgment by tertiary institutions that food insecurity exists has disregarded any doubt that students may have in terms of securing their next meal. Using food aid programs to prove that food insecurity

is indeed embedded in the lives of postgraduate students. According to Ndobo (2013), research and engagement on food aid programs have positive impacts in enhancing academic excellence, decrease drop-out rates, and increase graduation retention. Food insecurity creates awareness about the existence of food insecurity at tertiary institutions, particularly the assessment of food security is necessary. Placing them at the epicenter of the broader economic context. The roles of food aid programs are closely linked with the institutional systems in which they operate. Food aid programs go far beyond the basics of providing food it allows postgraduate students to reach their full potential academically. Food aid programs have a huge impact on the students, campus community, institutional level, and economic growth. The role of food aid programs is to understand how food insecurity is influenced and the context in which it manifests.

2. LITERATURE REVIEW

2.1 Food Security

Sabi (2018) notes that food insecurity is acknowledged as an essential socio-economic factor. According to the Food and Agricultural Organisation (FAO) (1996) notes that "that food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for a healthy and active life". This means that individual nutritional needs must be met to be food secure. Food insecurity exists when there is uncertainty about where the next meal will come from. This definition can be best understood in the context of student food security and the purposes of this research.

2.2 Overview of Food Security in South Africa

According to Gwacela (2013) during the year 2000, it was estimated that about 14.3 million people experienced food insecurity in South Africa. Van den Berg (2015) adds that in 2012 54% of households experienced food insecurity. Hendricks (2014) notes that South Africa can provide enough food for all its people as stated by agricultural policies. Sehlabane (2014) note that the rights of citizens are protected by several legislations that have been put in place to ensure that government does not infringe upon these rights. The Constitution of the Republic of South Africa of 1996 and the 2004 South African Social Security Agency Act (SASSA) are some of the legislative bodies that uphold and regulate the right to food (Sehlabane, 2014). Classen et al (2016) note that the government has created policies, safety nets, nutrition programs that will ensure the availability, accessibility, and affordability of safe and nutritious food for food-insecure households and individuals. These initiatives need the co-operation of various stakeholders such as the Department of Social Development and Agriculture, National Food Fortification programs. It has become very crucial for agricultural policies to provide adequate food for its people to have an acceptable economic, political and social order and for stability (Hendricks, 2014).

2.3 Student Food Insecurity

South Africa is one of the most unequal countries in the world and students have been affected by the realities of poverty (Adeniyi, 2018). The impacts of food insecurity go beyond the borders of university campuses, they are experienced in South Africa and other countries (Davidson, 2020). Some tertiary institution nationally has started initiatives to feed its students through food aid programs (Van den Berg, 2015). The aim is to ensure that South Africans engage in academic activities so that they can acquire the necessary qualifications that contribute to the labour market. Van den Berg (2015) notes that this addresses the racial inequality in South Africa by enrolling disadvantaged students into higher education. This is the outcome of apartheid as the challenge of the dropout rate is consistent. Food insecurity at the tertiary level can be expected as the proportion of the students are coming from food insecure communities (Meko and Jordaan, 2016). Many households lack self-sufficiency even though South Africa can secure food and produces sufficient food (Drewett, 2018). Students coming from these households find themselves battling the same problems at university.

2.4 Food initiatives at Universities in South Africa

According to Van den Berg (2015), South Africa does not fall short of food rather it is the inadequate access to food by students. Among the vulnerable group, students suffer the brunt of a lack of nutritious food. Gwacela (2013) notes that for food-insecure students, access to education is seen as a gateway to a rewarding and fruitful life. In so doing, educational resources should be made available and accessible to achieve academic success. It is feasible that food insecurity may contribute to poor student success, as it is known to be a continuous threat if not addressed at university (Van den Berg, 2015). Food has become part of policy issues recognized at the university level. And that food is not easily attainable for students (Dominguez-Whitehead, 2015). Students are trying to escape the socioeconomic factors experienced in poor communities; however, food insecurity seems to be impossible to escape even at university (Gwacela, 2013). According to Meko and Jordaan (2016), the University of Free State launched a campaign to combat student hunger. The campaign was known as the No Student Hungry which specifically provided students with a daily allowance to purchase food on campus. This was one of the efforts by the university to show commitment to alleviating food insecurity among students. The Student Representative Council at Stellenbosch University was able to launch a #Move4Food drive to ensure that no student goes hungry by building a sustainable solution for students. According to Van den Berg (2015), the UKZN has 20% of underperforming first-year students who regularly sent remittances diverted from their loans or bursaries home, leaving very little on which to survive. These students often feel obliged to send financial aid money home to support their families.

2.5 Food Security at UWC

The University of the Western Cape was established in 1960 during apartheid. The foundational basis that it was established for coloured students was rejected by its council in 1978 (Keats, 2009). It later became known as the intellectual home of the left in the late 1980s (Breier, 2010). The proportion of African student enrolment grew more significantly over the years from 13% to 58% because of the changes in the university policy on student access (Letseka and Cosser, 2010). UWC transitioned from difficult financial times and created a new vision that aligns itself with sustainable processes that enhance student development (Keats, 2009). The university accommodated many impoverished student's and some of these students left the university without completing their qualifications because they were too poor to stay (Breier, 2010). The major challenge faced by students experiencing food insecurity is dropping out of university because the student cannot handle being food

insecure. Adeniyi et al (2018) note that since the #FeesMustFall movement food insecurity among students has been recognized by university administrators. UWC has responded to the increase of food aid programs since 2015 by exploring a wide range of solutions. In so doing, increasing access to food and ensuring that the processes for distribution of food are properly maintained (Buch et al, 2016). UWC addresses food insecurity through research, education, and partnerships (Adeniyi, 2018). The University of the Western Cape, the Dullah Omar Institute (DOI), and the Centre of Excellence in Food Security (CoE) support seminars that have to do with alleviation strategies of food insecurity (Adeniyi and Durojaye, 2020). The center conducts formative research that supports a sustainable food system that ensures food security for marginalized and vulnerable groups. The increase in demand for food assistance has created solutions by asking for assistance from different donors such as Tiger Brands. UWC opened its first pantry in 2017 to many students who are food insecure. This partnership is aimed at taking 3-5 years because it realizes that students need to be empowered for effective learning. Some programs have been established as additional programs such as exam food aid programs. The Student Representative Council also serves meals for students as part of their initiative to end food insecurity among students by serving lunch and supper during the exam period using the #No Hunger Can Stop Our Success as their slogan. In partnerships with local grocery stores such as Pick n Pay, students were given vouchers to buy from the store (Adeniyi and Durojaye, 2020).

2.6 Roles of Food Aid Programs

UWC has a history of solving its problems differently from other universities, it uses strategies that ensure that no student is left behind (Breier, 2010). The focus is on the ability to be an agent of change not only on academic support but on basic needs such as food security and nutrition. The idea is opening opportunities for support in different departments such as the Centre for Student Support Services and the Gender Studies Department that also distributes food packages to students in need (Buch et al, 2016). This is an investment in education and has been supported by NGOs, professional alumni, and the campus community. This has drawn food alleviation activities taking place annually hosted by the different departments within the university (Buch et al, 2016). The campus community is motivated by the strength of the students coming forward for assistance regardless of the stigma attached to such programs. This ignited the establishment of other programs established by faculties, Gender Equity Unity, and platforms such as Facebook: UWC Fairy Godmother, seminars hosted by the Dullah Omar Institute to discuss food insecurity (Buch et al, 2016). The Tiger Brands initiative strengthens internal partnerships to help alleviate food insecurity as many campus community members understood the scope of the problem at UWC. The university acknowledges the provision of food parcels is not a long-sustainable solution. Students understand that food packages are not hand-outs but make a huge difference as most are dependent on them each month. UWC has made great strides in the measures taken to respond to food insecurity alleviation.

2.7 Reasons for Student Food Insecurity

According to the Food Insecurity Brief (2006), students may be vulnerable to food insecurity, which consists of different factors leading to vulnerability. Some of these factors may include household demographics, social and institutional access rights.

2.7.1 Students from a Low Socio-economic Background

According to Kassier and Veldman (2013), student enrolment from economically disadvantaged backgrounds has increased which has introduced the realities of socio-economic disparities of student backgrounds within universities. This contradicts that being at university is a privilege because many students are faced with financial difficulties. The idea is that students' basic needs are being met at university hence less is said about food insecurity because universities are considered elite (Dominguez-Whitehead, 2015). Sabi (2018) notes that students who experience food insecurity are most likely to be from low-income households. Duffy (2002) notes that some of the households are headed by single parents that are struggling economically. A single-headed household is more likely to struggle financially than households headed by two parents. Gwacela (2013) notes that low-income households are more likely to purchase cheaper, refined grains while high-income households purchase healthier and quality food.

2.7.2 Financial Aid

According to Kassier and Veldman (2013), the government provides financial assistance for tertiary students through National Student Financial Aid Scheme (NSFAS). This ensures that students have a sustainable financial aid system that provides them with loans and bursaries. The aim is to make a difference in the lives of students who cannot afford to pay university fees (Kassier and Veldman, 2013). Students from poor families apply for financial assistance (NSFAS) to help with the costs of education (Gwacela, 2013). Sabi (2018) notes that students qualify through a means test and if the family can pay towards the studies. Financial aid is unable to provide a sustainable system that covers student tuition fees, accommodation, books, and food. This makes it more difficult for the student who has limited or no financial resources (Kassier and Veldman, 2013). If there is a stipend available for the student, it will depend on the institution to distribute it and how the student manages their finances (Sabi, 2018). However, in most cases, NSFAS does not cover all the basic needs such as the stipend that is mostly needed for food. This opens the financial gap which makes it difficult for the student to stay or drop out.

2.7.3 Expenditure on Other Items

According to Chaparro et al (2009), food insecurity exists when students misdirect their funding on other items that are not food related. This increases the chances of the student being food insecure as these items are not food related. Sabi (2018) notes mismanagement of money occurs irrespective of the student financial status. They expose themselves to food insecurity because they misdirect their funds. They lack budgeting skills, food use, and not prioritizing grocery listing. (Gwacela, 2013). The management of finances by students often lack the necessary skills to manage money to buy groceries that will stretch to the next month's budget (Chaparro et al, 2009). This often leads to the funding being depleted before the academic year ends (Dominguez-Whitehead, 2015).

2.7.4 On-Campus Expensive Food

Gwacela (2013) notes that food prices on campus have affected the quality of food students choose, as nutritious food is expensive to purchase. Kassier and Veldman (2013) note that foods such as fruit and vegetables which have higher energy are more expensive. Dominguez-Whitehead (2015), high food prices on campus have unrealistic high prices, and residential services have shifted away from the catering model to self-catering. Students would purchase food that is cheap elsewhere, and purchase foods with low nutritional value (Van den Berg, 2015). The catering model on residences was more convenient for students, food was readily available for students in a variety to choose from. The catering model provided ready-to-go healthy food options and having access to the meals daily (Van den Berg, 2015). This model prepared students to focus more on their studies than having to worry about preparing meals (Dominguez-Whitehead, 2015).

2.8 Correlation between Food Insecurity and Academic Performance

For students to live an active lifestyle and provide good results they should always have access to nutritious food (Barret, 2010). Sabi (2018) note that student academic performance is affected because there are students who go for days without having a meal because they cannot afford to buy. According to Kassier and Veldman (2013), hunger can affect concentration and energy levels which often leads to tiredness, this affects the cognitive functioning of the student. Gwacela (2013) notes that food insecurity reduces the student's chances of partaking in academic activities because one's physical ability has been affected. Food is one of the important contributors to student development which makes it an important factor to understand the experiences of students in getting food (Dominguez-Whitehead, 2015). Students who experience food insecurity have often affected their educational outcomes (Dreijmans, 1988). In so doing, they lose focus on their academics because they always looking for ways to feed themselves.

2.9 Covid 19 and Food Insecurity

In March 2020 South Africa was faced with coronavirus disease which was a global crisis experienced worldwide. The pandemic showed the importance of being food secured and how South Africa was able to produce food for its citizens. It has affected every facet of students' lives and has been essentially a food security problem. The four components of food security are very useful in establishing food security among students. They include availability and accessibility of food, food utilization or consumption, and stability of supply (Savary et al, 2017). The availability of food was very crucial for South Africans including students. Appropriate structures must be available to stock up empty pantry shelves and suppliers must be able to maintain food production (Savary et al, 2017). This is depending on the ability of the university to store and distribute food (Duffy, 2013). This is particularly important in forming partnerships with the agricultural sector to maintain the availability of food. Many parents lost their jobs and income which reduced their inability to provide for their families. This had a negative impact on students who were not allowed to campus but had to face the daily realities of food insecurity at household levels. The pandemic forced universities to rethink their operations by doing assessments through remote multimodal teaching and learning. This was important in containing the virus as many universities suspended all contact classes and some students were asked to remain on the residence while others were asked to vacate.

2.10 Theoretical Application

The Basic Needs Approach (BNA) will be used as a theoretical framework that is most appropriate to assess food security and the role of food aid programs to defeat food insecurity among postgraduate students at UWC. The BNA tackles food insecurity as a challenge in the context of tertiary institutions concerning development. Traditionally the concept of basic needs denotes food, housing, and clothing. Broadly it includes sanitation, education, and health have been recently added. The focus of this study will refer to the critical basic need of food. The BNA proposes a better understanding of basic needs to students, it proposes the provision of adequate food and that all individuals are well fed. Poverty and unemployment were some of the underlying factors that influenced the shift in the BNA (Stewart, 1989). Food as a basic need has become a great concern among students and the BNA argues for individuals to have access to basic social and economic goods and services (Stewart, 1989). The BNA approach was endorsed by the International Labour Organization (ILO) in the late 1970s (Burchi, 2008). It highlighted a new model concerning the process of integration of non-economic dimensions of development. The economic and social system failed to provide individuals with the bare minimum condition of life during the third world. However, it recognized the need to secure access to important basic social and economic goods universally (Stewart, 1989). This goal led to the development of the basic needs approach to development, it was achieved mainly as the result of the failure of economic growth to reduce poverty in developing countries. Basic needs strategies may include food aid programs that are used to alleviate poverty and food insecurity. They may be considered as the basic ingredient in fighting the prevalence of food insecurity among students. Many students experience food insecurity; however, tertiary institutions can provide the minimum level of basic needs. Access to food is very influential in enhancing the students potential and living a full life. This is a goal for any student in achieving their full potential. This links the basic needs strategies and food aid programs as both adhere to the nutritional values of the marginalized. In so doing, students can be at ease knowing that they can enjoy a full life with other elements such as education. These elements include educational outcomes that are based on academic achievements, graduating, and entering the labour market. These elements allow students to enjoy student activities, participate in student structures because their basic needs are satisfied.

3. RESEARCH DESIGN AND METHODOLOGY

The research aimed at using both on-campus and off-campus students as research participants, as they are also affected by food insecurity. The inclusion of off-campus students broadened the research sample and presented many benefits. The research focuses on both on-campus and off-campus students as they face different challenges. The challenges range from food-insecure students staying with their families and food insecurity staying alone on residences. The benefit is using postgraduate students across different faculties, all race groups including international students. This means that a variety of perspectives is possible, with students ranging from Honors to Masters. In total, forty students participated in this research study. Students were selected by using a purposeful sampling method. The purposeful sampling method provided the richest information from the research participants. The participants will provide the necessary information based on their experience

with food aid programs. This sampling technique is more time effective as it requires a small sample size and cannot be generalized. Quantitative methods were used to classify and count features to answer the research questions. While qualitative methods were used to complete a detailed description of the research questions. Quantitative methods were used in this regard to focus on proving relations between students and food aid programs. Qualitative methods enabled the researcher to gain a view of the problem of food insecurity in the context of the participants by drawing meaning from their experiences. Mixed methods are appropriate as it addresses issues of nutrition and the relevance of the number of food aid programs that are available to curb food insecurity among students. This allowed participants to critically reflect on food insecurity at UWC even though it cannot be generalized to a larger population.

According to Goertzen (2017), quantitative research methods are founded based on collecting and analyzing data, which is organized and is represented numerically. One of the fundamental goals of quantitative research is to provide accurate and reliable measurements that can be statistically analyzed.

3.1 Questionnaires

This research study will provide a questionnaire that has open-ended questions that will allow participants to answer in their own words. This draws a deeper understanding and deeper responses than to selecting an answer from a set of choices. The researcher will distribute forty self-administered questionnaires to the participants. The questionnaire will consist of open-ended questions that provide a more reliable and valid measurement than closed questions. Open-ended questions can add richness which has a significant benefit to the outcomes of the survey. The use of open-ended questions will leave the discretion to the participants to respond and not be bounded by alternatives provided in the questionnaire. The covid 19 crisis has prevented people to be physically in contact with each other, thus, electronic questionnaire will allow the researcher to send the questionnaire without seeing the participants physically. The questionnaire aims to get responses from the participants that will answer the research questions. The participants will provide open-ended responses relating to the number of times they receive food assistance in a month, the number of food aid programs they request food assistance from, and how effective the food programs are in eliminating food insecurity.

3.2 Qualitative Methods

According to Van der Merwe (1996), qualitative research comprises an interpretive and natural approach to the world. It is about making sense of the world through the natural approach. Almkali (2016) qualitative research was applied as it seeks to understand the meaning that individuals ascribe to social or human problems. This relates to student's behaviour and how they feel or think about food aid programs (Gounder, 2012). Qualitative research is most suitable for this study as the objectives of the study aim to find a deeper understanding of the realities of food insecurity by putting things into context. The reality of food insecurity is socially constructed and shows that food insecurity is a complex issue affecting students globally.

3.2.1 Interviews

The qualitative methodological tool is in the form of semi-structured interviews. This will be a useful technique where students will be discussing in-depth their food security status and experiences on the food aid programs. Questions that will be asked will be in the form of open-ended questions such as why, how not what, which, when, and who. The interview will be tape-recorded, this will help to obtain accurate information from the participants and avoid losing written documents. The interviews will be between the students of the University of the Western Cape and those who are studying towards their second degree or third degree. Due to the pandemic, and the ban of face-to-face research, the interviews will be done telephonically and online through zoom meetings. Zoom meetings are a lifeline during the coronavirus pandemic, as it helps to connect people without having to see each other physically. This will help in gaining an understanding of the students by allowing them to share their opinions on food insecurity at UWC. Interviews through zoom meetings will help uncover other issues that may have not surfaced or come out in surveys.

3.2.2 Literature Review

The literature review undertaken has focused on literature obtained from academic sources on food insecurity among students globally, nationally, and at the university level. The literature that was obtained focused on the research questions of this study. Numerous searching platforms have been used to obtain articles from google scholar, jstor, the world wide web, medley. Other relevant sources include books, articles journals. The use of search phrases such as 'food insecurity at universities', 'student hunger', 'food aid programs', and 'student academic performance'.

3.3 Validity and Reliability

According to Babbie (2001), validity and reliability are significant qualities of measurements. Park (2011) notes that reliability assesses whether the question produces a consistent response. During the collection of data, the research objectives were explained to the participants which guaranteed full disclosure during data gathering. This is done through pre-testing. Salkind and Rainwater (2006) note that reliability occurs when a test measures the same thing more than once and produces the same results all over again. It comprises an observed score and a true score component. Validity assesses whether the question is measuring what was intended to measure. This is done through translating and retranslating the questions (Park, 2011). The researcher ensured validity by ensuring that the research objectives are addressed in the questionnaire.

3.4 Types of Data Sources

Data collection shows the variety of methods used in research (Sapsford, 1996). The methods used to assess student experiences will be collected through primary data and secondary data. Original data collected for the first time and a specific research topic is primary data (Hox and Boeijie, 20025). This data is combined with existing data to create new knowledge. Secondary data is data collected for a different research topic and can be accessed and used for another research problem (Hox and Boeijie, 20025). This data is conducted before primary data to find out what is already collected. It is data that has been already collected by another researcher which can align with the research question. The data that will be generated will focus on UWC students who make use of on-campus food programs. It will focus on factors influencing tertiary food insecurity,

impacts of food insecurity, and the measures taken to overcome food insecurity on campus such as food banks. The data is collected using English which is the medium of instruction at UWC.

3.5 Informed Consent

Participants will be explained a consent form before the interview is conducted. This helps the participants to understand the purpose of the research before signing the consent form. According to Connelly (2014), informed consent means that consent should be given freely and the research participants must understand what is being asked of them, and the participants must be competent to give consent. When the research is done, participants will be given the outcomes of the work so that they can clarify any inconsistencies that they might not be aware of. Research participants were not offered any rewards, this was explained to them before signing the consent form. The researcher is obligated to honor what has been stipulated in the consent form. Research participants must be provided with enough information regarding the implications of participation since food insecurity is a sensitive matter (Saunders et al, 2012).

3.6 Data Analysis Procedure

This research employed mixed methods as part of the research techniques to collect data. The sources of data that were collected include interviews and questionnaires which are referred to as the primary data. The literature review is referred to as secondary data collected by the researcher. Data analysis is used in transforming data to determine useful information. Data analysis is very useful in the research by providing information that will be used in discovering the extent to which food insecurity exists at UWC. The data collected from interviews will be recorded through zoom and carefully transcribed or summarized. The data will be coded using the principles of anonymity. The data is useful in assessing the role of the programs in enhancing food security. The data is useful in the decision-making of the need for the expansion of more food aid programs. Data analyses are influential in the decision-making of stakeholders to continue funding food aid programs because of the severity of the situation. Data analyses will help in the evaluation of policies concerning food insecurity at tertiary levels. For example, if the current food aid programs can provide sufficient food for its students.

3.7 Limitations of the Research Design

The assumed potential limitation would have been securing the venues for conducting interviews during university hours. However, due to covid19 conducting interviews through Zoom meetings turned out to be the best viable option. This study uses a non-probability sampling approach, hence cannot make a general statement about the total population of students at UWC. This study was only able to capture a sample size of UWC students which has limited the nature and coverage of the research. Therefore, future research needs to be done on other universities to address and fight food insecurity among the student populace. The focus was only on food insecurity and not the in-depth measures that are associated with it, such as hunger and poverty.

4. DATA ANALYSIS

The data was obtained by using online questionnaires and interviews to assess the roles of food aid programs and how they enhanced the student food insecurity status. The research findings are linked to the research questions which focused on the association between food insecurity at the postgraduate level and a range of interventions to curb food insecurity among students. The data was collected using quantitative methods and was achieved through obtaining thirty students that completed the questionnaire. The research participants were invited via email to take part in the questionnaire that was distributed online. The qualitative data was obtained from ten participants, through semi-structured interviews with UWC postgraduate students.

4.1 Demographical Information

4.1.1 Gender

The research participants that took part in the online questionnaire and interviews are beneficiaries of the available food aid programs on campus. The demographical details of students that emerged as the most vulnerable to food insecurity are females (70.7%). Consequently, (29.3%) males are found to be food insecure. The demographical details of the research participants indicated that students reach out for assistance regardless of their gender, race, age, nationality, and residence.

4.1.2 Race

The race of students who are at risk of food insecurity is that 15% of the research participants are identified as coloured students. While the majority are identified as Africa students (85%). Other racial groups did not participate in this study.

4.1.3 Age

The age group of the research participants consists of (95%) that is between 25 years to 30 years, while (5%) is over the age of 30 years. This points out that many young graduates continue to pursue their second degrees, despite being food insecure.

4.1.4 Nationality

The nationality of students receiving food aid is (5%) which are international students coming from African countries such as Zimbabwe, while the rest (95%) are South African students.

4.1.5 Residence

Table 1. represent the residence of students where a significant number of students are staying alone on-campus residence (970). While (530) students are staying off-campus. Table 1 shows that there are (1500) postgraduate students that receive food aid since January 2021.

Table 1

Residence of students

Total Number	On-Campus	Off-Campus
Total 1500	970	530

Students identified as coloured students come from the Western Cape. They stay off-campus with their families in areas such as Bishop Lavis, Belhar, Delft, and Athlone. While the majority are identified as black students (85%) coming from the Eastern Cape and stay on campus. However, some of the black students stay off-campus in the surrounding areas of UWC such as Phillipi, Nyanga, Langa, and Gugulethu. Students who are staying off campus are living with larger families and are dependent on the food aid programs. (65%) of students are staying on campus and are beneficiaries of the food aid programs. Students staying off-campus represent (35%) that receive food assistance. Hence utilization is more than expected. Sarah et al (2016) notes that economic hardships such as unemployment on postgraduate students can be lessened by implementing more work-study programmes.

4.2 Funding Status

As shown in figure 6, the high prevalence of food insecurity is (75%) of students who are not funded, while the (25%) that is funded relied indirectly on the food aid program as the funding takes longer to pay allowances. The main reason that students join food aid programs is that they have no source of funding and financial support. Students face challenges of funding early in the year. The (75%) of students who are not funded show that postgraduate students are greatly affected by food insecurity, particularly first-year postgraduates who need support.

4.3 Other Ways to access food or money?

Figure 7 represents other ways that students indicated they access food from. One of the common food sources includes family (30%) and friends (40%). students rely on the work-study programmes (10%) as a way that the student can have money to buy food. Students receive food assistance while waiting for bursaries to be disbursed and work-study contracts to be renewed. Other income-generating sources include selling muffins and airtime (10%) within residences. In addition, students access to food included social grants (10%) for those who are single parents.

4.4 Educational Status

The educational status is that (22%) of students indicated that have performed less than their potential in academic assessments. The (45%) of students that have missed important deadlines have been negatively affected, they must ask for permission to submit on a later date. This is overwhelming as more assessments need attention from the student. If a student is granted an extension on the assessment it means that the student will have to extra hard as late submissions are strictly scrutinized. The (11%) of students indicated that they lacked focus on their academics due to being hungry. Students that missed classes represent (11%) because they were too hungry to concentrate in class. Students have missed classes and they have to spend their time accessing food and focused less on their academics. Students felt that not having food for breakfast affected their concentration levels, especially when webinars take up to 3hours which is from ten in the morning to one in the afternoon. While (11%) went to class hungry. Another (11%) failed the academic year because of the challenges of studying while hungry and their studies being compromised.

4.4.1 Educational Level

The educational level of the research participants includes students studying towards their Master's degree, Honors degree, and Postgraduate Certificate in Education.

4.4.2 Number of students receiving food aid

The emphasis from the research participants is that all food programs are helpful as they receive food monthly. The SDS nutrition and wellness program is funded by Tiger Brands and is one of the biggest programs on campus as most of the students indicated that they receive food from this program. Table 2 demonstrates the rise in the number of food-insecure students receiving food assistance. In January only (420) postgraduate students were receiving food, this includes students who were part of the catch-up programme at the beginning of the year. February and the proceeding months show that due to covid 19 the numbers of food-insecure students increased drastically. The demand for food aid increased from 420 students to assisting 1500 students. Table 2 shows a dramatic increase for each month when compared to the previous month in students receiving food.

Table 2.

Food Aid

Number of Students	Jan	Feb	March	April	May
1500	420	790	930	1350	1500

4.4.3 How often do students make use of food?

There are (46%) of students make use of the campus food aid programmes throughout the year. Students that make use of the food aid programs until they get funding are (27%). Students usually get funding the next semester, until then they depend on the consistency of the food aid program. Students that collect their food parcel once each term (9%) indicated that they are not entirely dependent on the food aid program as they access food through other sources. Students that are part of the work-study programme (9%) stop receiving food once they sign their contracts. While some students are not frequent users and only access food aid programs when they run out of food (9%).

4.5 Information about Food Aid

The following are the responses of students about where they found out about the food aid program. The results show that they heard from various sources. The majority got information from friends (25%) and the SRC (25%). Online platforms

were also influential for students to know about the food aid programs, such as the UWC newsletter website (10%), and Facebook (10%) and student political organizations (30%).

4.6 Other needs

Figure 12 shows that students (46%) felt that all food programs should include sanitary towels. This indicated that there should be one program that deals specifically with this basic need and relates to many female students. Perishable items (27%) included meat and eggs. Clothing (9%) is considered a basic need and students felt that it will form an important part of the food aid program. Medical expenses (9%) form part of one's well-being and health is a basic need. Another need that students felt that can be done is serving lunch for students (9%) during lunch break. This idea came from the temporal feeding schemes that operate during exams. Students felt that this will further boost class attendance as students will have no excuse to attend and actively participate in class.

4.7 General Challenges

The majority which is (70%) of students felt that they did not experience any challenges with the food aid programs as long they benefit from them. While the rest (30%) felt that food aid programs need to improve to do better.

4.8 Aspects that can be improved?

Other aspects that can be improved by all the available food aid programs and that (30%) of students need consistency in the quantity of food. The quantity of food provided to students changes every month depending on the number of students receiving food for that month. Students (30%) felt that they wait too long for their next collection and when the student has missed the collection time, the consequences are still to wait longer. The available food aid programs on campus do not provide the same assistance. They cater a variety of food and the quantity differ significantly as some do not offer basic toiletries (20%). Students felt that it will be an advantage to have a food aid program that caters to nutritious food (10%) such as vegetables, eggs, and meat. Students (10%) felt that food aid programs must be confidential, students must stand in lines to collect parcels and everyone can identify them.

4.9 Stigmatization

Only 40% of the students felt embarrassed when collecting the food parcel because of the stigma attached to food insecurity. Students felt that they are not comfortable with being known to being a beneficiary of a food program, the fear of being pitied and known for struggling. The queue of collecting the food parcel is degrading and appropriate measures of privacy should be practiced. 60% of the students indicated that they have nothing against other students knowing they receive food assistance. This points out that (60%) of students are not held back regardless of stigma and other negative implications associated with food insecurity.

5. DISCUSSION

5.1 Food Sources

As shown by the research findings, UWC postgraduate main sources of food are from the available food aid programs. The most frequently used food aid programs include the SDS Nutrition and Wellness Project, UWC Fairy Godmother, and the Reslife food aid program. The food aid programs ensure sustainability and consistency in feeding postgraduates regardless of their educational level. These food aid programs play a significant role in reducing food insecurity by eradicating the assumption that post-graduate students can support themselves while studying. Students indicated that their food security status is improving particularly that the food aid programs continue feeding students throughout the year. Food aid programs thrive despite challenges presented by the coronavirus and have become more conscious about the basic needs of the students.

5.2 Approach to Food Security

The research participants indicate that they receive food from one program available on campus. However, during the examination they would eat the meals provided by the SRC and student political structures. The meals are provided to all students who are hungry for breakfast and lunch. This correlates with the demand and high numbers of applications for food during examinations, where most students need effective interventions. During the preparation of exams, these temporal feeding schemes are the most appropriate measures that can be taken to help reduce poor examination performance. Students in leadership have drawn attention to all university structures to show interest in their students shows interest by mobilizing for food sources. This approach in addressing food insecurity is imperative to get long-term solutions. Although the students indicate that they would like to benefit from more than one food program.

5.3 Collection Process

The systems of distribution have been well developed but should not intimidate students from collecting food, and this is a growing concern for some beneficiaries. The food aid program differs as one program may cater for only residential students such as the Reslife food aid program. While the other offers assistance to both residential and off-campus students, such as the SDS nutrition and wellness program. This shows the relationship between food insecurity and students and whether which programs cater for on-campus students is in itself an indication of the prevalence of food insecurity at UWC. Due to covid 19 and the initial experiences from the previous year. The approach of the food aid program was to expand the distribution posts from one to four, for the collection of food parcels. The distribution posts are made available to accommodate both on-campus and off-campus students for collection, this depends on the residence close to their area. This included the DISA residence, Gorralla residence, Hector Peterson residence, and Reslife Office parking for those staying on-campus. Students are reminded through emails to collect their food parcels. Students staying off-campus and who do not have a permit to access campus due to covid are encouraged to collect on off-campus collection points. During the collection of food parcels, students must maintain covid 19 regulations. Students must always wear their masks and must not be accompanied by friends to limit the number of students that are allowed for collection.

5.4 The Impact of Food Aid at UWC

The most satisfying aspect of the food program is the elimination of the uncertainty of not having food being distributed the next month. Throughout the 2020 academic year when the pandemic started all students received food, until the end of the academic year. Students had to vacate their rooms and go back home but for those who stayed behind, they were still catered for throughout the year. Particularly off-campus students. Students felt that food aid programs eliminated doubt about where they will get food. The other aspect that are satisfying about the food aid programs are that they cater to different needs.

5.5 Student Support

This is one of the most key issues concerning food aid programs. Beneficiaries need kindness during this time, this usually draws other students who are suffering in silence. This also shows students that there is help available and there are students affected by food insecurity. This means that fewer postgraduates go to bed hungry, and more students can seek assistance because they have been seen and referred by a beneficiary. Food aid programs are associated with poverty and the stigmatization of students is one aspect that cannot be ignored as struggling students continue to suffer. Students that are food insecure must be able to access food, however, it has been difficult for some students who cannot come forward. This cannot be overlooked as it affects the students psychologically. This needs the attention of administrators of food aid programs to deal with stigmatization with sensitivity as some students feel ashamed to come forward and ask for help. The approach of the food aid programs in addressing the issues of stigmatization should include referrals to counselling sessions that will help in stimulating self-confidence.

5.6 Covid Restrictions

Some of the well-known food aid programs were discontinued due to covid 19, it was mostly dependent on donations for food items from staff members and students. Due to lockdown levels, most staff members and students did not go back on campus following strict restrictions and donations stopped. The food aid programs operated without financial stability and relied on sponsors for supplying food. Some sponsors are once-off and are not long-term, this creates more challenges as food insecurity remains a critical challenge. Other food aid programs continue feeding students with lockdown restrictions which are very valuable to students receiving aid. There is a continuously integrated plan for all adjusted levels to accommodate students who are in need. Food aid program administrators work tirelessly to follow the necessary covid protocols for the collection of food parcels. Students are aware of all the changes and alternatives of distribution points made available to students.

6. CONCLUSION

This study found that postgraduate students do experience food insecurity and the available food aid programs should be expanded. The number of students accessing food aid programs is significantly increasing and cannot be ignored. This suggests that more food aid programs should be endorsed specifically to accommodate other basic needs. The university should invest in food aid programs by contributing financial support. New approaches should be used to address the complex problem of food insecurity so that students are not deprived of the right to perform better in their studies. In addition, this research suggests the need for more research to be conducted to understand the struggle of food among postgraduate students. The university needs to revisit policies to ensure that student needs are addressed. In so doing, policymakers can help make meaningful contributions towards creating measures that will produce successful food aid programs. Sustainable solutions to the University will strengthen support services that assist students with access to food. The establishment of food aid programs at the University level sets precedent for the next generation of students that also come from low-socio-economic backgrounds.

This study has explored the connection between food insecurity among postgraduate students and the role of food aid programs at the University of the Western Cape. In so doing, it has highlighted the current food status of postgraduate students and the different interventions to curb food insecurity. In addition, the study has reviewed the literature on food insecurity and food aid programs among students globally and nationally. The outcome is that food insecurity has emerged at tertiary institutions and there is growing literature in South Africa that indicates that students are vulnerable to food insecurity. More research is being conducted particularly by introducing strategies that help alleviate food insecurity among students.

7. REFERENCES

- Adeniyi, O., Nthoiwa, J. and Mirugi-Mukundi, G., 2018. National colloquium on access to food for students in South African tertiary institutions: challenges of hunger among students in higher education in South Africa (13–14 August 2018). *ESR Review: Economic and Social Rights in South Africa*, 19(4), pp.21-23.
- Adeniyi, Oluwafunmilola & Durojaye, Ebenezer 'The Right to Food of Students in Tertiary Institutions in South Africa (Dullah Omar Institute 2020).
- Almalki, S., 2016. Integrating Quantitative and Qualitative Data in Mixed Methods Research--Challenges and Benefits. *Journal of education and learning*, 5(3), pp.288-296.
- Babbie, E., 2001. Qualitative field research. *The practice of social research*, 9, pp.298-300.
- Barrett, C.B., 2010. Measuring food insecurity. *Science*, 327(5967), pp.825-828.
- Breier, M., 2010. From 'financial considerations' to 'poverty': towards a reconceptualisation of the role of finances in higher education student drop out. *Higher Education*, 60(6), pp.657-670.
- Buch, K., Langlely, S., Johnson, T. and Coleman, N., 2016. A university-community partnership to combat food insecurity among college students. *Partnerships: A Journal of Service-Learning and Civic Engagement*, 7(1), pp.16-26.
- Chaparro, M.P., Zaghloul, S.S., Holck, P. And Dobbs, J., 2009 Food insecurity prevalence among college students at the university of Hawai'i at Manoa. *Public Heal Nutrition*.12 (11):2097-2103.
- Classen, N., Van Der Hoeven, M. And Covic, N., 2016. Food environments, health and nutrition in South Africa: Mapping the research and policy terrain.

- Davidson, A.R. and Morrell, J.S., 2020. Food insecurity prevalence among university students in New Hampshire. *Journal of Hunger & Environmental Nutrition*, 15(1), pp.118-127
- Dominguez-Whitehead, Y., 2015. Students' food acquisition struggles in the context of South Africa: The fundamentals of student development. *Journal of College Student Development*, 56(3), pp.292-308.
- Drewett, J., 2018. Student Food Security: the (dis) connection between student food experiences, sustainability and green spaces from lens of food security (Masters thesis, University of Cape Town).
- Du Toit, D.C., Ramonyai, M.L. and Ntushelo, V., 2011. Food Security by Directorate Economic Services. Production Economics Unit. *Department of Agriculture, Forestry and Fisheries, South Africa*. Available online at: <http://www.nda.agric.za/docs/GenReports/FoodSecurity.pdf> (accessed 10 April 2017).
- Duffy, P.A., Hallmark, G.G., Molnar, J.J., Claxton, L., Bailey, C. and Miklouch, S., 2002. Food security of low-income single parents in East Alabama: Use of private and public programs in the age of welfare reform. *Southern Rural Sociology*, 18(1), pp.48-81
- FAO (1996) Declaration on world food security. World Food Summit, FAO, Rome.
- Goertzen, M.J., 2017. Introduction to quantitative research and data. *Library Technology Reports*, 53(4), pp.12-18.
- Gounder, Sam., (2012). Chapter 3-Research Methodology and Research Method.
- Gwacela, M., 2013. *Exploring food insecurity and socio-economic factors affecting academic performance: a case study of first year students on probation and at-risk of academic exclusion* (Doctoral dissertation).
- Hendriks, S., 2014. Food security in South Africa: Status quo and policy imperatives. *Agrekon*, 53(2), pp.1-24.
- Hox, J.J. and Boeijs, H.R., 2005. Data collection, primary versus secondary.
- Insecurity, F., Vulnerability Information Management System. 2006. Food insecurity in Sekhukhune. *Food Security Information Brief*, 1.
- Kassier, S. Veldman, F., 2013. Food security status and academic performance of students on financial aid: the case of University of KwaZulu Natal. *Alternation Special Edition*, 9, pp.248-264.
- Keats, D., 2009. The road to Free and Open Educational Resources at the University of the Western Cape: a personal and institutional journey. *Open Learning: The Journal of Open, Distance and e-Learning* 24 no, 1 (2009)47-55.
- Letseka, M. and Cosser, M., 2010. Student retention & graduate destination: Higher education & labour market access & success.
- Meko, N.L. and Jordaan, E.M., 2016. The food environment of students on a financial assistance programme at the University of the Free State, Bloemfontein. *South African Journal of Clinical Nutrition*, 29(3), pp.116-117.
- Munro, N., Quayle, M., Simpson, H., & Barnsley, S. 2013. Hunger for knowledge: food insecurity among students at the University of KwaZulu-Natal. *Perspectives in Education*. 31(4): 168- 179.
- Ndobo, F. and Sekhampu, T.J., 2013. Determinants of vulnerability to food insecurity in a South African township: A gender analysis.
- No.108 of 1996 Legislated: 15 January 1996n Bill of Rights (Chapter 2 of the Constitution of the Republic of South Africa.
- Park, A., 2011. Using Survey Data in Social Science Research in Developing Countries.
- Sabi, S.C., Kolanisi, U., Siwela, M. and Naidoo, D., 2019. Students' vulnerability and perceptions of food insecurity at the university of KwaZulu-Natal. *South African Journal of Clinical Nutrition*, pp.1-8.
- Salkind, N.J. and Rainwater, T., 2006. *Exploring research*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Sapsford, R. and Jupp, V. eds., 1996. *Data collection and analysis*. Sage.
- Saunders, M., Lewis, P. and Thornhill, A. (2012) "Research Methods for Business Students" 6th edition, Pearson Education Limited
- Savary, S., Bregaglio, S., Willocquet, L., Gustafson, D., D'Croz, D.M., Sparks, A., Castilla, N., Djurle, A., Allinne, C., Sharma, M. and Rossi, V., 2017. Crop health and its global impacts on the components of food security. *Food Security*, 9(2), pp.311-327.
- Sehlabane, M.P., 2014. *Social Relief of Distress as an effective strategy in reducing food insecurity: The perceptions of social workers at the Department of Social Development, Johannesburg Metropolitan Area* (Doctoral dissertation, University of the Witwatersrand, Faculty of Humanities, School of Human and Community Development).
- Stewart, F., 1989. Basic needs strategies, human rights, and the right to development. *Human Rights Quarterly*, 11(3), pp.347-374.
- Van den Berg, L. and Raubenheimer, J., 2015. Food insecurity among students at the University of the Free State, South Africa. *South African Journal of Clinical Nutrition*, 28(4), pp.160-169.