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## IMPROVING THE GROWTH OPPORTUNITIES OF SMALL-SCALE ACCOMMODATION BUSINESSES THROUGH GOVERNMENT-PRIVATE SECTOR INTERVENTION

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### Abstract:

One of the fastest growing sectors of the South African economy is tourism. As such, it provides an excellent opportunity for profit-driven entrepreneurs. Within the tourism sector, small-scale accommodation businesses (SSABs) have become popular for the 'relative' ease of establishment. Given their relative ease of establishment and the accruable benefits for the owner/manager, factors that impede their expansion deserve research attention. Interestingly, as extant literature suggests, business expansion and sustainability issues are among the growth challenges confronting SSABs. This study thus aimed to determine the factors that interfere with developing and sustaining SSABs in Cape Town's Central Business District (CBD). A quantitative technique was used in this study, with 100 questionnaires distributed to respondents within SSABs in and around Cape Town's City Centre. The data was analysed with IBM SPSS Statistics software, and the results are provided in tabular format using cross-tabulation and/or graphs. As a critical sector of the Cape Town tourism industry, SSABs face increased competition and a lack of financial assistance. Additionally, they are affected by macroenvironmental forces such as political, technological, legal, environmental, economic, and social forces. The findings suggest that the government should invest more in assisting SSABs in developing (1) more effective strategies for reducing crime in the Cape Town central business district (CBD), which affects the tourism market, and (2) more favourable regulations for visitors and tourism-related activities. Additionally, SSABs must establish business relationships with large hotels in order to accelerate the sector's growth.

**Keywords:** *water crisis; Day zero; tourism development; small business; lodging businesses, Cape Town, PESTLE.*

### Introduction

Establishing and sustaining a business – small or medium – is beneficial to any society. This is owed to its capacity to improve standards of living of the owners and those who work in the business (Koens & Thomas, 2016; Kontsiwe & Visser, 2019). Improving living standards reduces poverty-related problems (Mukwarami & Tengeh, 2017; Kontsiwe & Visser, 2019). According to World Travel and Tourism Council (WTTC) (2019), small businesses contribute to development by assisting most countries in achieving economic growth. The establishment of a business as an economic force, a job creator, and a solution to society's problems makes it a focal point for research in various

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significant industries, including tourism. Tourism is an essential engine of economic development in South Africa (Odhiambo & Nyasha, 2020; Dlomo, 2021), outperforming and expanding at a higher rate than most sectors (Solvoll, Alsos & Bulanova, 2015). As a burgeoning tourist destination, many expect small and medium enterprises within this sector to flourish and be better off than their counterparts in other sectors.

Notwithstanding its potential, the tourism sector is not without its challenges. According to Sheikh (2015), tourist firms confront various obstacles, depending on the nature of the firm. While Rogerson's (2008) study stresses the necessity of examining the issues faced by small tourist enterprises across Southern Africa, Ramukumba and Ferreira (2016) argue that emphasis should be paid to small businesses (such as accommodation) due to their strategic value. Within the tourism sector, small-scale accommodation businesses (SSABs) have become popular for the 'relative' ease of establishment. A reasonable assumption would be that given the ease of establishment there is a possibility that many who set up do not understand the challenges they will confront; the government's willingness to see an increase in small businesses may cloud the necessary scrutiny for registration and capability to set up and run a business. Owing to these, it is instructive to examine the state of these businesses and by doing so uncover the challenges that owner/managers may confront. We respond to these calls for more studies on ways to improve the growth opportunities of small-scale accommodation businesses in Cape Town.

Considering the foregoing, the study aimed to:

1. To highlight the specific challenges faced by SSABs.
2. To suggest ways of ameliorating the challenges.

The next section reviews literature pertaining to the challenges of small businesses in the tourism sector of South Africa. This is followed by a report of the peculiar challenges SSABs are confronted with. The method used in carrying out the study is followed by the findings and discussions. We flag some recommendations – future study directions and implications in the conclusions section.

## **2. LITERATURE REVIEW**

### **2.1 Challenges of small businesses in the South African tourism sector**

Small businesses in South Africa face various challenges, which is true of small businesses in the tourism sector. Numerous factors can reduce the tourism market's attractiveness, whether for customers and clients or entrepreneurs seeking to enter the sector (Nieman et al., 2008). Tourism is a sector that requires significant entrepreneurial support (Solvoll, Alsos & Bulanova, 2015). According to Rogerson (2008), there needs to be a closer look at the difficulties faced by small tourism businesses in southern Africa.

#### **2.1.1 Access to finance**

Financial considerations and access to capital are critical components of small business development in South Africa. Among the numerous challenges identified by researchers in tourism and small business development, financing the business remains one of the most prevalent, as it is with most business ventures. According to Rogerson (2008), due to their seasonal nature, small tourism businesses face difficulties obtaining financial support and bank loans. They are considered suspect creditors because their inconsistent performance erodes the lender's trust. The lack of financing for entrepreneurs in tourism jeopardizes businesses' ability to grow and expand (Nieman et al., 2008). Businesses require funding for marketing and operations. Without financial support, businesses may find it difficult, if not impossible, to operate, grow, or survive. On the other hand, financial institutions such as banks are more likely to aid big enterprises than small ones (South Africa. Department of Small Business Development, 2017).

#### **2.1.2 Weak currency**

Like any other factor in the business environment, economic factors describe the economic situation in a particular destination or region, notably the state of the local currency. Any travel business is subject to currency fluctuations (Bazargani & Kiliç, 2021). The epileptic state of the South African currency poses a constant threat to the housing market (News24, 2019), essentially harming the small-scale accommodation business. It is critical for tourism businesses in South Africa to be aware of their pricing and rates, as these may affect the tourism market's performance (Bizcommunity, 2019).

#### **2.1.3 Competition**

Businesses that provide services or products to meet a specific market need to compete (Asoba & Tenengeh, 2016).

Competition can be viewed as a significant impediment to the growth of small tourism businesses (Sheikh, 2015). Low entry barriers increase the possibility of competition for small established tourism businesses, which is the presence of established and larger businesses on the market. They may, however, come up against a potential competitor who thrives in the sector around them. According to Mokoena (2016), many entrepreneurs decide to start a tourism venture despite lacking the necessary skills. They lack prior knowledge of the tourism sector and a variety of other facets of the sector. This may significantly impact their ability to compete and grow in a large market like tourism, as they are exposed to competition.

#### **2.1.4 Safety and security**

Locals in potential tourist destinations may resent their country's growing tourism sector, which could lead them to take measures that harm the sector (Fridgen, 1996). For instance, South Africa's tourism sector, particularly its small businesses, may be adversely affected by its relatively high crime rate (Nieman et al., 2008). The number of tourists visiting a country is directly proportional to its commitment to visitor safety and security. Since 2018, many nations have issued travel advisories for their citizens, warning them about the dangers of visiting South Africa due to its high crime rate (South African Tourism, 2018). The Covid-19 pandemic is only one factor that could be causing a decline in the number of tourists visiting South Africa and the cancellation of reservations made in advance. Henema (2019) claims that 2019's xenophobia-related violence could hurt South Africa's tourism sector because the country's reputation as a safe vacation spot has been damaged.

#### **2.1.5 Visa regulations**

When viewed as a legal factor in the business environment, visa regulations may be one of the issues confronting South Africa's tourism sector. Magwaza (2014) asserts that new immigration requirements have a detrimental effect on tourism. In 2014, the South African government implemented immigration measures requiring people travelling with children to carry detailed birth certificates and visitors from countries such as China, India, and Russia to apply for permits in person (Cohen, 2016). Tshivhengwa (2019) asserted that the requirement for an unabridged birth certificate portrayed South Africa as a hostile environment for family travel. Visitors may feel unwelcome and hesitant to spend time in South Africa. This could affect the number of visitors, as many may change their vacation destination to a more hospitable and accessible location. This means that if the entry requirements to South Africa were more accessible, the number of visitors would increase, as tourists would receive more 'bang for their buck' due to favourable exchange rates. The tourism sector may benefit from this situation, which will help keep the hospitality sector growing. South Africa should also expedite the implementation of the digital visa to increase visitor numbers, as visa delays and limited capacity to provide visas to visitors have had a negative impact on lucrative tourism markets such as Nigeria and China (South African Tourism, 2018).

#### **2.1.6 Other**

An additional issue that must be addressed is the market's dearth of foreign language agents. South Africa's tourism sector is well-known for its diverse clients, as visitors come from various parts of the world (South African Tourism, 2018). However, the absence of foreign language speakers in their service offerings can stifle the sector's growth and stunt the expansion of small tourism businesses (Carlisle et al., 2021). Small-scale accommodations businesses will benefit from investing in this to enhance their offerings.

## **2.2 THE CASE OF CAPE TOWN SMALL ACCOMMODATION ENTERPRISES**

### **2.2.1 Competition issues in Cape Town**

Cape Town has a wide variety of hotels and other lodging options to meet the needs of its visitors. While larger accommodation providers such as hotels can better anticipate and adapt to market shifts, small and medium-sized operations face an uphill battle to maintain and expand their presence (Mokoena, 2016; Mukwarami & Tengeh, 2017; Tengeh & Nkem, 2017). More than ten hotels belonging to well-known chains opened in Cape Town between 2017 and 2018, increasing the city's overall hotel capacity (PwC, 2019) and thereby increasing competition. As a result, small businesses were put under even more pressure to compete with large hotel chains that enjoy international recognition and a solid customer base.

Additionally, new entrants to the market, such as Airbnb and other online travel providers, pose a threat (Blal et al., 2018). Airbnb is considered a market disruptor, increasing competition for traditional lodging providers (Blal et al., 2018, Sainaghi & Baggio, 2020). Unlike conventional lodging establishments, Airbnb is an unregulated model (Nieuwland & van Melik, 2020).

## 2.2.2 Impact of the water crisis on small accommodation establishments in Cape Town

The 2018 water crisis exacerbated existing issues (South African Tourism, 2018). In 2018, 'Day Zero' became popular in the Western Cape province (Ziervogel, 2019). This was a nightmare for the city's residents and leaders because it meant that Cape Town would run out of water very quickly. 'Day Zero' became the catchphrase for the day when all dams supplying Cape Town would run dry. The province and Cape Town residents were affected, but the crisis posed substantial challenges for the commercial and tourist industries, notably the hotel sector. For example, when Cape Town's dam levels dropped to 27.8% in September 2017, the municipal council was forced to request that companies reduce their water use by 20% (Visser, 2018). Cape Town, which attracts almost two million visitors annually, was experiencing the most significant water crisis in living memory, and tourists and the hospitality sector were advised to conserve water (Diallo, 2018).

Despite the campaign to present South Africa as an open market for leisure and business travel, the issue of the water crisis in the Western Cape province affected reservations during the peak season (South African Tourism, 2018). Visitors' awareness of the problem was a restricting factor in their decision-making. According to Roelf (2018), hotels requested their guests to limit their showers and refrain from bathing, as this could result in excess water consumption, exceeding their commercial property water allowance. This dissuaded visitors, as they felt their presence might exacerbate the crisis and detract from their vacation experience. Accommodation providers thus saw occupancy rates decline.

## 2.2.3 Safety concerns in Cape Town

Another factor affecting small-scale accommodation businesses is the high level of crime in Cape Town. Despite the city's excellent reputation as a desirable tourist destination, Cape Town, like many other cities and tourist destinations worldwide, faces threats to its residents' and visitors' safety and security. Asoba and Tengeh (2016) and Tengeh (2016) assert that the high crime rate forces entrepreneurs and businesses to prioritise the safety and security of their business operations and clients over competitive strategy. Criminal activity has compelled small firms to increase their security expenditures, thus increasing business costs (South Africa. Department of Small Business Development, 2017). Tourism operators need to operate safely and protect their customers/clients. According to Ishmail (2019), the director of the South African branch of Crime Stoppers International, Yusuf Abramjee, believes the country's negative image due to crime can influence the tourism sector, especially the arrival of foreign visitors. Safety and security issues could discourage entrepreneurs from entering the sector, as they might not have the financial resources to implement the requisite measures to ensure the safety of their clients, thus preventing potential clients from visiting. Security issues in Cape Town are alarming and sometimes limit the number of places tourists can visit without the fear of being robbed. According to Mabuza (2019), citing the 2018/19 State of Urban Safety in South Africa Report, Cape Town is the top city, out of nine listed cities in South Africa, in terms of violent crime like murder, robbery, and attacks on property. Figure 1 demonstrates that Cape Town's central city was listed as one of the most affected areas in 2019 (Crime Stats SA, 2019).

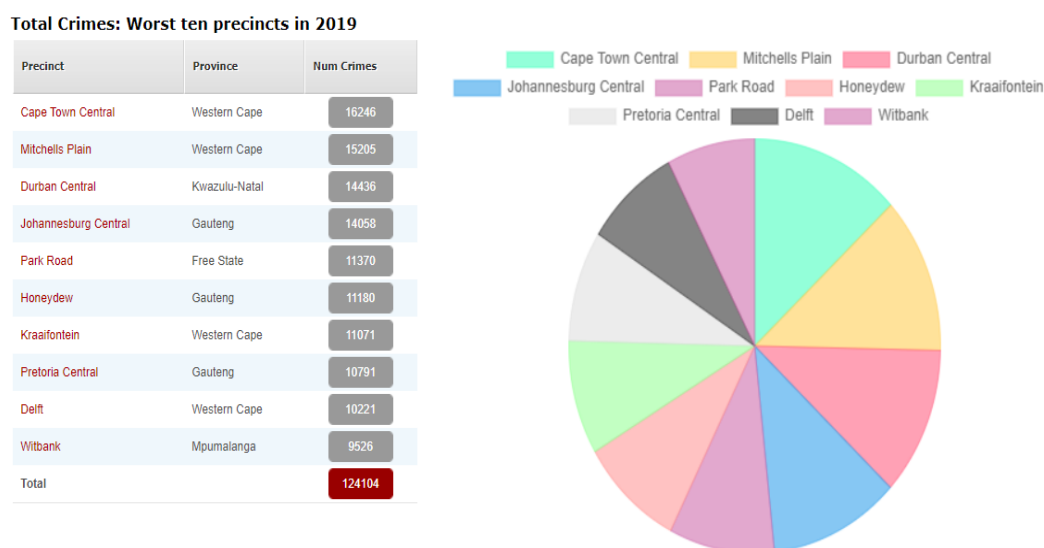


Figure 1: Worst ten precincts: largest number of reported crimes  
Source: Crime Stats SA (2019)



## 2.2.4 Load shedding issues

Load shedding is also mentioned among the various difficulties encountered by the sector and primarily by small businesses in Cape Town. In an interview conducted by Fin24 magazine, Jeremy Lang, the regional general manager at Business Partners, stated that the most impacted business sectors during power shortages are manufacturing, retail and hospitality (Fin24, 2019). According to Steenkamp et al. (2016), small accommodation businesses in Cape Town face load shedding, thus impacting their revenue and productivity. Indeed, even if there are options like LED solar lights and generators, some small firms cannot afford the cost of such contingency plans to survive in the long term. Load shedding, for instance, can cause problems for business operations like online bookings and check-ins. They are unable to provide online responses to inquiries or upload occupancy data.

## 3. RESEARCH METHODOLOGY

This research used a quantitative approach, with 100 questionnaires delivered to respondents from small lodging establishments in and around Cape Town's City Centre.

The primary data was obtained from small lodging business owners and/or managers who participated in a personal interview and completed a questionnaire about their businesses. Secondary data gathering included an examination of published and unpublished materials. These included periodicals, magazines, books, online materials, dissertations, and theses pertaining to the tourist business, particularly the hotel sector. Additional sources of information were reviewed, including the Southern Africa Tourism Services Association, the South African Department of Tourism, and the Western Cape Tourism Board.

IBM SPSS Statistics software was used to analyse the data, and the findings are presented in tabular format through cross-tabulation and/or graphs.

### 3.1 Target population and sampling method

In research, the population refers to the individuals who are the subject of a study. According to Taherdoost (2016), 'sampling' is picking a subset of people from a more significant population or a total number of persons as participants. The research population consisted of general managers and owners of small lodging enterprises in the Cape Town central business district. The researchers made no distinction between official and informal enterprises throughout the investigation.

The city's central business district is expected to include 58 hotels and guesthouses (Pirie, 2007; CCID, 2019). Again, those sources make no distinction between various kinds of lodging nor offer precise figures for each group but rather present an estimate of the number of guesthouses and backpackers.

Due to a dearth of data on the number of small lodging establishments in Cape Town's central business district, the researchers used a non-probability approach (Showkat & Parveen, 2017). Tengeh, Ballard and Slabbert (2011) recommended using the snowball approach to contact responders. It is a non-probability sampling strategy that allows the researcher to contact a small, hard-to-reach community by asking respondents to suggest more possible participants.

### 3.2 Location of the research

The study took place in Cape Town's central business district (CBD). The region was selected because visitors often visit it, making it easier to locate many tourism enterprises.

The CBD is home to a diverse range of businesses and serves as the province's transportation hub (road, rail, and bus). It is bounded on the northeast by the V&A Waterfront, one of the city's most famous landmarks; on the northwest by the Atlantic Seaboard, with its residential character; on the west and south by the City Bowl; and on the southeast by District Six and Woodstock (Businessstech, 2017).

### 3.3 Sample size

Due to the inherent challenges of conducting research, exacerbated by a lack of reliable estimates of the desired population's size, a representative sample of 100 enterprises was chosen based on the average sample sizes of

previous studies of this type (Tengeh, Ballard & Slabbert, 2011). According to researchers such as Krejcie and Morgan (1970), samples of this size are large enough to generalise the conclusions of a research study to the full target population.

### **3.4 Pilot test**

The researchers conducted a pilot study to ascertain the instrument's validity before collecting the final data. To accomplish this, ten questionnaires were distributed to owners and/or managers of small accommodations in the CBD. This assisted in refining the questionnaire specifically to determine the comprehension and relevance of each question.

The researchers deduced from this test that the majority of the target respondents were not in the city or country at the time. The second observation was that respondents lacked time, as evidenced by their requests for the researchers to complete the questionnaire on their behalf. They responded verbally while going about their daily activities. It was noted that some questions were repeated in another format, which occasionally resulted in a delay in completion, as it was inefficient to repeat the same or similar answers. Finally, and perhaps most significantly, was the length of the questionnaire, which respondents found to be excessively lengthy and time-consuming. The initial schedule of 31 questions was reduced to 21. As a result of this experience, several questions were modified and/or deleted to facilitate comprehension, and the survey was also condensed to make it more convenient and time efficient.

### **3.5 Data-collection procedure**

A questionnaire was used to collect the data. The questionnaire included questions with many possible responses from which respondents may pick. The questionnaire had 31 questions at the testing stage and comprised open-ended, closed-ended, and multiple-choice questions. The questionnaire was shortened to 21 items after the pilot test.

At the onset of the data-collection process, the questionnaires were administered at respondents' businesses for their convenience. To prevent the paper surveys from being lost, they were generally filled out on the spot. One of the researchers had to set an appointment with each participant to verify that they understood the questions and completed the questionnaire correctly when necessary. Because of their hectic work schedules, some respondents could not complete the surveys, and the researcher had to transcribe their responses as they spoke.

Because data collecting began only a few weeks before South Africa's national lockdown in response to the worldwide Covid-19 outbreak, the researcher had difficulties contacting and meeting with respondents as intended. As a result, the paper-based questionnaire was converted to an online/digital survey with the same questions as the original version. This was done to avoid physical contact and respect the social distancing protocol. The link to the Google form containing the survey was sent to the participants via email, WhatsApp, and Facebook Messenger to facilitate access to the survey and collect results more comfortably and faster. Once the expected number of responses was reached, the data were consolidated into a single file, and analysis began.

### **3.6 Data analysis**

The results were based on 100 sets of responses from participants. Data from hard copies were transformed into digital form and grouped into one file, combined with the online survey data already in digital format. The data was analysed using IBM SPSS Statistics software, and the results are provided in tabular format via cross-tabulation and/or graphs.

## **4. RESULTS AND DISCUSSIONS**

The presentation of the information collected through the questionnaire follows a sequential order. The contingency table presents the responses to each item in the research questions. The chi-square test of association follows this and proper assumptions check. The chi-square interpretation then follows. The presentation of the information is concluded by establishing the degree of the effect with the Cramer's V result.

This section, which starts with cross-tabulation tables showing the responses to all challenges of small-scale accommodation businesses related to tourism development, is divided into four sub-sections. The first part addresses possible challenges faced by SSAB when they started; the next part indicates the channel of business financing, followed by an examination of the performance of SSAB over the last two years; the last part is a brief exploration of some external factors possibly impeding the development of SSAB.

#### 4.1 Main challenges faced when starting an accommodation business

Table 1 indicates 'finding a good location' as the most common challenge respondents faced when starting their business project. More than 57% of respondents selected it among the challenges faced initially. Perhaps this is because the Cape Town Central Business District (CBD), a hub for business ventures (Greenberg & Rogerson, 2018), is also coveted by tourism firms, making it challenging to obtain the best location for an accommodation establishment. The next major issue selected by respondents was 'understanding the market'; it was indicated by more than 49% of respondents. Indeed, Mokoena (2016) suggests that many entrepreneurs in tourism start the venture without the necessary skills. This is important in assessing the sector and understanding the market they want to operate. This high rating can indicate a lack of market information for start-ups in the accommodation sector, associated with a lack of small-business support. This might be why Justino (2015) recommends that business owners first obtain business skills, whether through work experience in the targeted field or from relatives, before engaging in a business venture. More than 36% of respondents also identified 'obtaining finance' as a barrier. This result suggested that finance is not an issue in starting a small-size accommodation establishment but is still among the main challenges owners face in the sector. This result concurs with Asoba and Tengeh's (2016) findings of finance being among the most recurrent difficulties impacting small businesses' growth. Another barrier selected was 'government regulations', indicated by about 35% of respondents; however, it does not seem to be a significant constraint as the previous three. Other problems such as 'getting equipment' and 'teambuilding' can be considered secondary challenges, as indicated by less than 30% of respondents. This means they are present but do not impact accommodation as much as other difficulties.

Table 1: Main challenges in opening an accommodation business

Variable	NoB	Mode	Mode frequency	Cat	Freq	Perc%
Obtaining finance (start-up capital)	101	No	64	No	64.000	63.366
				Yes	37.000	36.634
Obtaining equipment	101	No	72	No	72.000	71.287
				Yes	29.000	28.713
Teambuilding	101	No	83	No	83.000	82.178
				Yes	18.000	17.822
Finding a good location	101	Yes	58	No	43.000	42.574
				Yes	58.000	57.426
Understanding the market	101	No	51	No	51.000	50.495
				Yes	50.000	49.505
Government regulations	101	No	65	No	65.000	64.356
				Yes	36.000	35.6944

#### 4.2 Channels of funding to start SSAB

Table 2 indicates that 'personal savings' is the most prevalent channel of financing used by respondents. Out of 101 respondents, 79, representing over 78%, suggest that they used 'personal savings' as funding options to start their accommodation venture. This result may suggest that small accommodation businesses cannot easily access financial assistance. This is followed by 'family and friends' contribution', selected by about 48% of respondents. Only 16 out of 101 respondents indicated 'Bank loan', giving a low percentage of 15.8%. The results suggest that financial institutions do not necessarily assist SSAB at startup. Mostly they rely on their income or support from friends and relatives. This is supported by Asoba and Tengeh (2016), highlighting that this can be the main element influencing growth and the ability to survive for small companies. Therefore, if financial institutions and authorities assisted SSAB initially, this would enhance the sector's development, encourage business investment and reduce the risk of failure. These findings corroborate the financing challenges identified in Table 2 among the significant difficulties encountered by SSAB.

Table 2: How did you obtain funding to start your business? \* SBFR cross-tabulation

	SBFR		Total
	No	Yes	
Bank loan	85 84.2%	16 15.8%	101 100.0%
Family/friends' contribution	52 51.5%	49 48.5%	101 100.0%
Personal savings	22 21.8%	79 78.2%	101 100.0%
Other, please specify	100 99.0%	1 1.0%	101 100.0%
Total	259 64.1%	145 35.9%	404 100.0%

### 4.3 Business performance

In terms of performance in the last two years, the result revealed that profit stagnancy has the most significant distribution mode<sup>1</sup>. However, the next most frequent response indicates poor profit performance of the firm with an exact frequency of stagnant growth. This implies small-scale accommodation establishments face serious business developmental issues related to profit improvement. The next is company sales with a similar ranking, with profit improvement shown in Table 3 below. The sales revenue result shows that most respondents indicated a second-worst rating, described as poor sales revenue, followed by stagnant/average sales revenue. No respondents indicated 'best', but 11 respondents indicated the worst performance. The number of employees was also rated 'poor', followed by 'stagnant', with similar patterns as the two previous business development indicators. The remaining business development indicators include several customers and marketing efforts. On average, the marketing efforts indicated stagnancy, while the number of customers was poor. Therefore, there is a need to look into marketing channels to ascertain the marketing of small-scale accommodation establishments in the CBD.

Table 3: Business performance over the last two years

Variable	NoB	Mode	Mode frequency	Cat	Freq per cat	Perc (%)
Profits have improved	101	Stagnant	37	Better	15.000	14.851
				Poor	37.000	36.634
				Stagnant	37.000	36.634
				Worse	12.000	11.881
Sales revenue has improved	101	Poor	42	Better	20.000	19.802
				Poor	42.000	41.584
				Stagnant	28.000	27.723
				Worse	11.000	10.891
Number employed has increased	101	Poor	42	Better	10.000	9.901
				Poor	42.000	41.584
				Stagnant	26.000	25.743
				Worse	23.000	22.772
Number of customers has increased	101	Poor	34	Best	2.000	1.980
				Better	23.000	22.772
				Poor	34.000	33.663
				Stagnant	31.000	30.693
				Worse	11.000	10.891
Marketing of the company has been implemented	101	Stagnant	35	Best	4.000	3.960
				Better	23.000	22.772
				Poor	29.000	28.713
				Stagnant	35.000	34.653
				Worse	10.000	9.901

<sup>1</sup>The measurement of the performance was before the hit of Covid-19 pandemic, around 2018 and early 2019.

#### 4.4 Threats from external factors to SSAB development

A portion of the research questionnaire was used to assess potential adverse effects on or threats to the SSAB market. A set of one or two items in the cross-tabulation table below has been used and grouped into specific categories such as social, technological, and economic factors to summarise their extent. Environmental factors were assessed separately since items were extracted from two separate questions in the research questionnaire, Questions 1.6 and 3.3.

- Environmental factors:

“The water crisis has affected the profit of many small accommodation businesses.”

The statement addressed the impact of this environmental or natural factor on SSAB in the Cape Town CBD and established if it was a challenge. According to the results, 76.2% of respondents confirmed that the city's water shortage harmed their business. Camilleri (2018) identifies water and electricity as necessary amenities for a tourism destination. As a result, shortages of water and electricity are a concern. Of the respondents, 20% were neutral, while 3% did not indicate the water crisis as problematic.

#### **“The weather in Cape Town impacts my business activities during the year.”; “What is the best financial period for your company?”**

Table 4 presents two distinct items in the questionnaire: ‘The weather in Cape town impacts my business activities during the year’, and ‘What is the best financial period for your company?’. On the influence of the weather on SSAB, most respondents confirmed that the weather in Cape Town impacts their business activities during the year. Over 49% agreed and 17.82% strongly agreed with this statement. This corroborates the 93% of respondents who agreed that their best financial period is summer. This can indicate that other seasons of the year are not that favourable for SSAB, as there might be fewer visitors to Cape Town and thus fewer customers, resulting in a low profit. According to the respondents, summer is the most viable season.

Table 4: Adaptive table for threats of environmental factors to SSAB in the Cape Town CBD

Variable	NoB	NoC	Mode	MF	Cat	Freq	Perc (%)
As an owner/manager, what is the best financial period for your company?	101	4	Summer	94	Autumn	2	1.980
					Spring	1	0.990
					Summer	94	93.069
					Winter	4	3.960
The weather in Cape Town impacts my business activities during the year	101	5	Agree	50	Agree	50	49.505
					Disagree	8	7.921
					Neutral	22	21.782
					Strongly Agree	18	17.822
					Strongly Disagree	3	2.970

The other items are discussed in the cross-tabulation. These include social, technological, economic and political factors to observe how they can be threats to the development of SSAB.

- Social factors:

Responding to whether **“crime is a real threat to people visiting the country”**, 1% of the respondents disagreed or strongly disagreed with the statement, and 9.9% were neutral. In contrast, 89% of respondents agreed that crime threatens people visiting Cape Town. These findings accord with the literature review regarding the influence of social factors and addressing safety and security concerns. Hence, the findings concur with those of Bryden (2020), that besides all other difficulties, safety is a major concern for SSAB.

Regarding whether **“Security in the City Centre must be improved ”**, 89% of respondents agreed or strongly agreed that security in the City Centre should be improved. Asoba and Tengeh (2016) corroborate this by stating that crime forces establishments to focus on operational strategies rather than market competition. This confirms

that security in this area is critical for sustaining the tourism sector and developing SSAB, as visitors are looking for a secure location.

- Technological factors:

**“My company lost much money during the load shedding period.”**

The preceding statement sought to ascertain the financial impact of load shedding. While technology is a valuable tool for SSAB, it facilitates business operations, particularly for reservations. Indeed, Lau (2020) asserts that technology has advantages and disadvantages. As mentioned in the literature review, load shedding has impacted the city for several years and may continue to do so, wreaking havoc on businesses. Nearly 73% of respondents agreed that they lost a significant amount of money due to load shedding, 24.8% were unsure, and only 3% disagreed or strongly disagreed that they lost revenue. This could indicate that SSABs do not always have adequate contingency technology plans or funding, thus suffering significant consequences.

- Economic factors:

**“The cost of running an accommodation business in the central business district is very high.”**

87.1% of respondents agreed or strongly agreed that the cost of running an SSAB in the Cape Town CBD is very high, 11.9% were neutral, and 1% disagreed. This challenge can be a consequence of the high level of competition identified in Table 4. Indeed, it could be indicated that the greater the competition, the greater the marketing strategy and business development should be. This is expensive on such limited budgets. Competition in this area might require extra efforts for SSABs to survive. According to Mukwarami and Tengeh (2017), lack of proper financial resources can impede the business's growth.

**Table 5: Threats from external factors on SSAB development**

*As an owner/manager, to what extent do you agree with the following statements regarded as threats?*

\* CFABR cross-tabulation

	CFABR					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Crime is a real threat to visitors	1 1.0%	0 0.0%	10 9.9%	41 40.6%	49 48.5%	101 100.0%
Security in the City Centre must be improved	0 0.0%	0 0.0%	11 10.9%	52 51.5%	38 37.6%	101 100.0%
Poverty is one of the factors affecting security in the city	1 1.0%	1 1.0%	13 12.9%	38 37.6%	48 47.5%	101 100.0%
The water crisis has affected the profit of many small accommodation businesses	1 1.0%	2 2.0%	21 20.8%	50 49.5%	27 26.7%	101 100.0%
The weather in Cape Town impacts my business activities during the year	3 3.0%	8 7.9%	22 21.8%	50 49.5%	18 17.8%	101 100.0%
My company lost a lot of money during load shedding	1 1.0%	2 2.0%	25 24.8%	46 45.5%	17 26.7%	101 100.0%
The cost of running an accommodation business in the central business district is very high	0 0.0%	1 1.0%	12 11.9%	48 47.5%	40 39.6%	101 100.0%
Government regulation is one of the main challenges restricting entrepreneurs from operating in the City Centre	1 1.0%	10 9.9%	24 23.8%	44 43.6%	22 21.8%	101 100.0%
Total	8 1.0%	24 3.0%	138 17.1%	369 45.7%	269 33.3%	808 100.0%

- Legal/Political factors:

***“Government regulation is one of the main challenges restricting entrepreneurs from operating in the City Centre.”***

While 10.9% of respondents disagreed and strongly disagreed, 23.8% were neutral concerning the above statement. However, a very high rate of over 65% agreed and strongly agreed government regulations were among the barriers constraining entrepreneurs from running a business in the City Centre. Dlomo (2021) argues that in order for tourism to become self-sufficient and thriving, local governments need to create conditions that are both safe and conducive to the growth of the business. This is perhaps because entrepreneurs having difficulty complying with stricter and unfriendly regulations and might prefer to invest elsewhere.

In presenting the findings above, we adopted the concept of PESTLE. As far as the researchers are concerned, this heralds a new beginning for this concept in studies related to SSABs within the South Africa tourism sector.

## **5. CONCLUSION**

South Africa's hospitality industry, particularly in Cape Town's central business district, is experiencing significant problems. Several risks in the market include competition and other environmental variables. Despite this, the tourism sector in the Western Cape has enormous growth potential not simply because of its tourist destination profile but if exemplary leadership and support are in place.

According to the findings of this study, financial difficulties were not the most apparent obstacle to the SSAB's expansion, but they were one of the initial concerns. It was mentioned that because banks are hesitant to fund businesses of this size, most small lodging businesses have to rely on personal savings to get started. Lack of familiarity with the market is rarely mentioned first but is revealed to be a significant challenge in many cases. Businesses need the help of local governments to flourish, so those governments must adopt policies more conducive to business growth. Since small businesses lack the resources to implement effective crime-fighting strategies, the South African government should step in to address the underlying safety and security issues external to their operations.

The South African government and the City of Cape Town should create more supportive regulations, ease business policies for small-sized accommodation businesses, and develop thriving tourist attractions. As a result, business owners and SSAB will feel more at ease investing in the sector and will be free to expand as they see fit.

## **6. LIMITATIONS AND SCOPE FOR FUTURE RESEARCH**

The difficulty in obtaining primary data during the pandemic of Covid-19 was a significant obstacle to the study's success. The data collection commenced at the beginning of the Covid-19 pandemic in 2020, and the restrictions made it impossible to reach most businesses. As a result, the study's sample size and overall design had to be revised so that the master's degree that was part of this study could be earned. Against this backdrop, a follow-up study is necessary to account for the Covid-19 pandemic experience.

The locale of the study was Cape Town's Central Business District. A comprehensive picture of Cape Town or South Africa can only be obtained by expanding the study to other areas. Additionally, given the recent pandemic, future research may consider its impact on tourism, particularly on small businesses. Finally, we note an interesting link between small-scale accommodation facilities and township tourism in extant literature (for example, Maret, Iwu, Musikavanhu & Handayani, 2018; Muresherwa, Amony, Iwu & Dube, 2020; Ezeudji & Dlomo, 2020). We believe township tourism makes an essential rural/township entrepreneurship contribution and thus deserves further studies in line with the necessity to improve local economic development.

## **7. IMPLICATIONS**

Consequences for small enterprises are discussed, as are specific actions from the government and the banking community. Small-scale lodging businesses can benefit from a heightened focus on tourism. This suggests a more active role for municipal government in assisting small-scale enterprises serving the tourism industry. In addition, financial institutions should provide sufficient funding for entrepreneurs and small-scale lodging firms for the industry's growth. To achieve this goal, the government and banks might launch a specific financial support program



for small businesses in the hospitality industry, which is a key component of the tourism industry.

Another important point that is derivable from this study is the necessity for entrepreneurial skills development for SSAB owners and managers. This point is made from the concerns raised regarding the socioeconomic, political and technological challenges that seem to limit the participants. In this regard therefore, and in recognition of the economic value of the hospitality sector, efforts should be enhanced to cultivate a culture of continuous training and development among SSABs.

## References

- Asoba, S.N., & Tengeh, R.K. (2016). Analysis of start-up challenges of African immigrant-owned businesses in selected craft markets in Cape Town, *Environmental Economics* 7(2), 97–105. Available at: [https://doi.org/10.21511/ee.07\(2\).2016.10](https://doi.org/10.21511/ee.07(2).2016.10).
- Bazargani, R.H., & Kiliç, H. (2021). Tourism competitiveness and tourism sector performance: Empirical insights from new data, *Journal of Hospitality and Tourism Management*, 46, 73-82.
- Bizcommunity. (2019). *Realistic pricing important for tourism growth*. Available at: <https://www.bizcommunity.com/Article/196/373/196168.html> [Accessed on 18 December 2019].
- Blal, I., Singal, M., & Templin, J. (2018). Airbnb's effect on hotel sales growth. *International Journal of Hospitality Management*, 73, 85–92.
- Bryden, N. (2020). The accommodation industry in South Africa. *Who Owns Whom*, 21 July. Available at: <https://www.whoownswhom.co.za/store/info/4861?segment=The+Accommodation+Industry+in+South+Africa+> [Accessed on 18 February 2021].
- Camilleri, M.A. (2018). *Travel marketing, tourism economics and the airline product: an introduction to theory and practice*. Cham: Springer.
- Carlisle, S., Zaki, K., Ahmed, M., Dixey, L., & McLoughlin, E. (2021). The imperative to address sustainability skills gaps in tourism in Wales. *Sustainability*, 13(3), 1161.
- Cohen, M. (2016). Weak rand bolsters tourism. IOL, 21 January. Available at: <https://www.iol.co.za/business-report/markets/currencies/weak-rand-bolsters-tourism-1973907> [Accessed on 21 October 2019].
- Crime Stats SA. (2019). *Worst ten precincts: largest number of reported crimes*. Available at: <https://www.crimestatssa.com/topten.php> [Accessed on 13 July 2020].
- Diallo, M. (2018). *Will tourists still flock to Cape Town if the water runs out? How We Made It in Africa*, 19 January. Available at: <https://www.howwemadeitinafrica.com/will-tourists-still-flock-cape-town-water-runs/60786/> [Accessed on 2 April 2019].
- Dlomo, T.O. (2021). Tourism as a tool for local economic development in King Sabata Dalindyebo Municipality. Master's dissertation. Johannesburg: University of Johannesburg.
- Ezeudji, I. O., & Dlomo, N. C. (2020). Residents and Domestic Leisure Travel: Mtubatuba Local Municipality in KwaZulu-Natal, South Africa. *EuroEconomica*, 39(1).
- Fridgen, J.D. (1996). *Tourism and the hospitality industry*. East Lansing, MI: Educational Institute, American Hotel & Motel Association.
- Fin24. (2019). *How load shedding hits SMEs – and what they can do about it*. 18 February . Available at: <https://www.fin24.com/Entrepreneurs/News/how-load-shedding-hits-smes-and-what-they-can-do-about-it-20190218> [Accessed on 21 October 2019].
- Greenberg, D., & Rogerson, J.M. (2018). Accommodating business travellers: the organization and spaces of serviced apartments in Cape Town, South Africa. *Bulletin of Geography. Socio-Economic Series*, 42,83–97. Available at: <https://doi.org/10.2478/bog-2018-0032>.
- Henema, U.S. (2019). Op-Ed: A tourism outlook on the looting of shops and xenophobia. *CNBC Africa*, 12 September . Available at: <https://www.cnbc africa.com/news/special-report/2019/09/12/op-ed-a-tourism-outlook-on-the-looting-of-shops-and-xenophobia/> [Accessed on 2 October 2019].
- Ishmail, S. (2019). Crime likely to affect forthcoming tourist season. *Cape Argus*, 18 September . Available at: <https://www.iol.co.za/capeargus/news/crime-likely-to-affect-forthcoming-tourist-season-33192258> [Accessed on 21 October 2019].



21 September 2019].

Justino, M.V. (2015). Factors influencing the failure of small enterprises in a selected municipality in Luanda, Angola. Unpublished MTech: Business Administration thesis, Cape Peninsula University of Technology, Cape Town, South Africa.

Koens, K., & Thomas R. (2016). You Know That's a Rip-Off': Policies and Practices Surrounding Micro-Enterprises and Poverty Alleviation in South African Township Tourism. *Journal of sustainable tourism*, 24(12), 1641–1654.

Kontsiwe, N.P., & Visser, G. (2019). Tourism as a vehicle for local economic development in small towns? When things go wrong: The case of Aliwal North, South Africa. *GeoJournal of Tourism and Geosites*, 27(4), 1334-1346.

Lau, A. (2020). New technologies used in COVID-19 for business survival: insights from the hotel sector in China. *Information Technology & Tourism*, 22(4),497–504. Available at: <https://doi.org/10.1007/s40558-020-00193-z> .

Mabuza, E. (2019). What's the most dangerous city in SA? New report offers some surprises. *Times Live*, 12 April . Available at: <https://www.timeslive.co.za/news/south-africa/2019-04-12-whats-the-most-dangerous-city-in-sa-new-report-offers-some-surprises/> [Accessed on 21 October 2019].

Maret, S., Iwu, C. G., Musikavanhu, T. B., & Handayani, R. A. D. (2018). Rural tourism as a way to build economic independence. *African Journal of Hospitality, Tourism and Leisure*, 7(4), 1-11.

Magwaza, N. (2014). New visa laws upset tourism. *IOL*, 6 July . Available at: <https://www.iol.co.za/business-report/economy/new-visa-laws-upset-tourism-1715043> [Accessed on 12 October 2019].

Mokoena, P.P. (2016). Community perceptions of the impacts and benefits of a service learning project for small, medium and micro enterprises in a department of tourism management at a university of technology. Unpublished MTech: Tourism and Hospitality Management thesis, Cape Peninsula University of Technology, Cape Town, South Africa.

Mukwarami, J., & Tengeh, R. K. (2017). Sustaining native entrepreneurship in South Africa townships: the Start-Up Agenda. *Acta Universitatis Danubius. (Economica)*, 13(4), 331-345.

Muresherwa, G., Amony, I., Iwu, C. G., & Dube, C. N. (2020). The impact of mountain gorilla tourism: a residents' perspective'. *African Journal of Hospitality, Tourism and Leisure*, 9(2), 1-18.

Nieman, G., Visser, T., & Van Wyk, R. (2008). Constraints facing tourism entrepreneurs in South Africa: a study in the Gauteng and Mpumalanga provinces, South Africa. *Development Southern Africa*, 25(3),283–296. Available at: <https://doi.org/10.1080/03768350802212063>.

News24. (2019). *Food and drink sector income jumps in December, accommodation lags*. 18 February. Available at: <https://www.fin24.com/Economy/South-Africa/food-and-drink-sector-income-jumps-in-december-accommodation-lags-20190218> [ Accessed on 19 March 2019].

Nieuwland, S., & van Melik, R. (2020) Regulating Airbnb: how cities deal with perceived negative externalities of short-term rentals. *Current Issues in Tourism*, 23(7),811-825. DOI: 10.1080/13683500.2018.1504899.

Odhiambo, N.M., & Nyasha, S. (2020). Is tourism a spur to economic growth in South Africa? An empirical investigation. *Development Studies Research*, 7(1), 167–177.

PwC. (2019). *Hotels outlook: 2019 – 2023 Future resilience*. Available at: <https://www.pwc.co.za/en/assets/pdf/hotels-outlook-19-2023.pdf> [Accessed on 18 October 2019].

Roelf, W. (2018). Cape Town's water crisis hitting tourism: officials. *Reuters*, 2 February . Available at: <https://www.reuters.com/article/us-safrica-drought-tourism/cape-towns-water-crisis-hitting-tourism-officials-idUSKBN1FM1PO> [Accessed on 21 October 2019].

Rogerson, C.M. (2008). Developing small tourism businesses in Southern Africa. *Botswana Notes & Records*, 39,23–34.

Ramukumba, T., & Ferreira, I.W. (2016). The role of government in support of tourism businesses: a perspective from guest houses in the Eden district region. *African Journal of Hospitality, Tourism and Leisure*, 5(1),1–11.

Sainaghi, R., & Baggio, R. (2020). Substitution threat between Airbnb and hotels: Myth or reality? *Annals of Tourism Research*, 83:1-11, Available at: <https://doi.org/10.1016/j.annals.2020.102959>.

Sheikh, M.R. (2015). Tourism entrepreneurship: Challenges and Possibilities in small tourism businesses. Unpublished thesis, Degree Programme in Tourism, Centria University of Applied Sciences, Kokkola, Finland.

- Solvoll, S., Alsos, G.A., & Bulanova, O. (2015). Tourism entrepreneurship – Review and future directions. *Scandinavian Journal of Hospitality and Tourism*, 15 ( 1),120–137. Available at: <https://doi.org/10.1080/15022250.2015.1065592>
- South Africa. Department of Small Business Development. (2017). *Research agenda*. Available at: [http://www.dsbd.gov.za/wp-content/uploads/2019/03/DSBD-Research-Agenda\\_Final-Narrative\\_6June17.pdf](http://www.dsbd.gov.za/wp-content/uploads/2019/03/DSBD-Research-Agenda_Final-Narrative_6June17.pdf). [Accessed on 18 October 2019].
- South African Tourism. (2018). *South African Tourism annual report: 2017/2018*. Available at: <https://live.southafrica.net/media/234722/sat-annual-report-final.pdf>.
- Steenkamp, H., February, A., September, J., Taylor, A., Hollis-Turner, S. & Bruwer, J. (2016). The influence of load shedding on the productivity of hotel staff in Cape town, South Africa. *Expert Journal of Business and Management*, 4(2): 69-77.
- Tshivhengwa, T. (2019). Tourism is ready to go if only travel regulations were too. *Business Day*, 18 January. <https://www.businesslive.co.za/bd/opinion/2019-01-18-tourism-is-ready-to-go-if-only-travel-regulations-were-too/> [Accessed on 18 October 2019].
- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *International Journal of Academic Research in Management (IJARM)*, 5(2):18–27. <http://dx.doi.org/10.2139/ssrn.3205035>
- Tengeh, R.K., & Nkem, L. (2017). Sustaining Immigrant Entrepreneurship in South Africa: The Role of Informal Financial Associations. *Sustainability* 2017, 9, 1396. Available at: <https://doi.org/10.3390/su908139>.
- Tengeh, RK. (2016). Entrepreneurial resilience: the case of Somali grocery shop owners in a South African township. *Problems and Perspectives in Management*, 14(4-1), 203-211. doi:10.21511/ppm.14(4-1).2016.09.
- Tengeh, R.K. Ballard, H., & Slabbert, A. (2011). A framework for acquiring the resources vital for the start-up of a business in South Africa: An African immigrant's perspective. *European Journal of Social Sciences*, 23, 362–381.
- Visser, W.P. (2018). A perfect storm: the ramifications of Cape Town's drought crisis. *The Journal for Transdisciplinary Research in Southern Africa*, 14(1), Article 567, 10 pp. Available at: <https://doi.org/10.4102/td.v14i1.567>
- World Travel and Tourism Council (WTTC). (2019). *Travel and Tourism Economic Impact 2019*. London, UK: WTTC.
- Ziervogel, G. (2019). Unpacking the Cape Town drought: lessons learned. Report for Cities Support Programme undertaken by African Centre for Cities. Available at: [https://cisp.cachefly.net/assets/articles/attachments/77902\\_ziervogel-2019-lessons-from-cape-town-drought\\_a.pdf](https://cisp.cachefly.net/assets/articles/attachments/77902_ziervogel-2019-lessons-from-cape-town-drought_a.pdf)



# DO CUSTOMER SATISFACTION AND LOYALTY MEDIATE THE EFFECT OF GRADUATE'S PERCEIVED SERVICE QUALITY ON GRADUATE'S PERCEIVED JOB PERFORMANCE?

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## Abstract:

The study investigated the mediating role of customer satisfaction and loyalty on the effect of perceived service quality on perceived job performance. Based on a sample size of 571, a cross-sectional survey was conducted in Harare, Zimbabwe. Hypothesised relationships were tested using structural equation modelling. Results show that perceived service quality positively influences perceived job performance, customer satisfaction and loyalty. The influence of perceived service quality on perceived job performance was found to be partially mediated by both customer satisfaction and loyalty. Results have theoretical and managerial implications.

**Keywords:** *customer satisfaction; loyalty; perceived job performance; perceived service quality; Zimbabwe*

## 1. INTRODUCTION

In all economies around the world, service quality plays an important role (Machado, 2019). Service companies that do not take service quality calls seriously have since struggled with business (Gupta, 2016). Organisations within the service industry gain a competitive advantage through service quality improvement (Tseane-Gumbi, 2019). Furthermore, Choudhury (2015) coined that competitive advantage within the service industry is determined by the way service providers meet customer expectations and this is one way to develop business. Makanyeza and Chikazhe (2017) urged service-based organisations to pay heed to demands for service quality because the success of a business depends on delivering a superior quality of service.

The quality of service in the higher education sector is crucial for a country because colleges train experts who should be effective and productive (Belwal et al., 2017). Higher job performance is what employers expect from university graduates (LeMahieu et al., 2017). It is therefore the duty of universities to raise the level of service delivery in order to produce highly qualified graduates who perform well in the workplace (Rahman et al., 2020).

The survival of service organisations is dependent on the management of programmes that satisfy customers (Borgogni et al., 2017). Improvement of service quality leads to increased customer satisfaction (Kaura et al., 2015; Uddin et al., 2018). For universities to satisfy customers, they should ensure that the level of service delivery meets

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or exceeds customer expectations (Kunanusorn & Puttawong, 2015). Graduates become satisfied and perform well at the workplace after having acquired relevant skills. Thus, improvement in university service quality results in increased satisfaction and also influences job performance (Borgogni et al., 2017; Guilbault, 2016). As such, customer satisfaction is often considered a mediator of the relationship between perceived quality of service and perceived job performance (Kunanusorn & Puttawong, 2015).

Improving service quality results in improved customer loyalty (Monica, 2017). In the higher education sector, universities are urged to raise service delivery levels, so as to improve customer loyalty (Guilbault, 2016). Monica (2017) proclaimed that if universities are to retain loyal customers, they need to monitor service performance within all departments. Thus, service quality influences customer loyalty and job performance (Chikazhe et al., 2020; Akinci et al., 2015). Graduates loyal to their training institutions are those that are performing well in the workplace. Therefore, customer loyalty indirectly influences the relationship between service quality and job performance (Choudhury, 2015; Chikazhe et al., 2020; Zaini et al., 2020).

Zimbabwe's higher education sector is not spared from the service quality call since graduates coming out of universities fail to meet employers' expectations (Muchemwa, 2017). Employers are concerned with the quality of graduates coming out of universities (Jawaad et al., 2019). The declining level of service quality within universities is alleged to be contributing to graduates' performance challenges (Martin & Parikh, 2017). Massive enrolment of students which has seen an upsurge in the lecturer-student ratio has been attributed to poor service delivery within the higher education sector (Espinoza et al., 2019). Additionally, university education is now regarded as a profit-making business with some institutions enrolling large numbers at the expense of quality (Shea & Parayitam, 2019).

In an attempt to overcome the challenge of service quality impacting the higher education sector, several studies have been carried out worldwide (Belwal, et al., 2017; Newman et al., 2019; Ushantha & Kumara, 2016). None of these studies attempted to incorporate customer satisfaction and customer loyalty as mediators in the relationship pitting perceived service quality and perceived job performance. Therefore, by exploring the mediating role of customer satisfaction and loyalty in the relationship between perceived service quality and perceived job efficiency, the current study aims to close this gap and further contribute to the services marketing body of knowledge.

## **2. THEORY UNDERPINNING THE STUDY**

A theory by Singh (2016) that examined the effect of service quality on job performance underpins this study. Singh (2016) developed a model, known as the Influence of Internal Service Quality on Job Performance Model, used to study the relationship between service quality and job performance within the public sector of Malaysia. Service quality was treated as a second-order construct and its dimensions (tangibility, reliability, empathy, assurance and responsiveness) were used to test the relationship against job performance. The model only tested direct relationships among the study constructs. The study by Singh (2016) did not consider any mediators or moderators to improve the results. The current study was meant to improve Singh's (2016) model by integrating customer satisfaction and loyalty within the study to add new knowledge to the services marketing body of knowledge. Thus, the current study enhances Singh's (2016) model by examining the mediation role of customer satisfaction and loyalty on the effect of perceived service quality on perceived job performance, within the higher education sector.

## **3. THEORETICAL FRAMEWORK**

### **3.1 Perceived job performance**

Perceived job performance is described as the employee's own assessment of the capability to carry out assigned tasks (Jawaad et al., 2019). Qureshi et al. (2019) settled that job performance refers to behaviour or activities performed by an individual aimed at achieving organisational goals. Quality and quantity expected from a specific job determine job performance (Akoto & Akoto, 2019). Various researchers (Abas & Imam, 2016; Mukucha et al., 2020) agree with the view that job performance has much to do with employee behaviour and task accomplishment. Similarly, Zaini et al. (2020) stressed that job performance is better explained by the evaluation of whether an employee is performing his or her duties as expected by the employer. Employees make their own assessments to find out if their performance is what the employer expects. Additionally, employers assess university service quality through graduates' performance (Plantilla, 2017). This study understands perceived job performance as their own assessment of job performance by university graduates.

Espinoza et al. (2019) describe job performance as the ultimate reliant variable of service quality within universities. Plantilla (2017) is of the opinion that individual skills play a pivotal role in enhancing employee job performance. In support, Abas and Imam (2016) indicate that better-skilled employees have the ability to perform well, and they carry

out assigned tasks with fewer challenges and minimum supervision. Likewise, Chaudhuri and Oba (2016) added that service quality elements like efficiency, effectiveness and productivity are well-thought-out when measuring an employee's job efficiency. Job performance is also influenced by the organisation's service delivery, environment, and as well as the organisational set-up (Al Ali, et al., 2016; Hodgman, 2018).

### **3.2 Perceived service quality**

Since 1980, the concept of perceived service quality has been extensively discussed without any agreement reached to date. Previous scholars have agreed that the quality of service is the difference between the expectations and perceptions of customers (Hattingh, de Waal & Parsons, 2018; Rajicet al., 2019; Solimun & Fernandes, 2018). Likewise, Peng and Moghavvemi (2015) delineate service quality as evaluations by customers between perceptions and expectations. The study considers perceived service quality as an appraisal by graduates of the university service provision system in relation to the achievement of their educational goals.

Competition intensity in the global market is driving organisations to encompass the service quality notion within their tactical planning decisions (Gwinji et al., 2020; Kim et al., 2015). Moreover, customers use service quality as a measuring tool to differentiate products or services on offer (Kim et al., 2015; Mwiya et al., 2019). For service quality to be acceptable, it must exceed customer expectation levels (Solimun & Fernandes, 2018). Services are difficult to manage due to characteristics, which include: heterogeneity, perishability, inseparability and intangibility (Kim et al., 2015; Mukucha et al., 2020). Firms that offer superior service quality are guaranteed of satisfied and loyal customers (Akoto & Akoto, 2019; Ramde, 2020). Thus, service quality is considered a better yardstick to use in measuring job performance (Plantilla, 2017).

### **3.3 Customer satisfaction**

Customer satisfaction is defined as how satisfied customers are with a company's service or goods (Plantilla, 2017; Zaini et al., 2020). Similarly, customer satisfaction was described by Zeithaml and Bitner (2013) as the decision by customers as to whether a service provider can fulfil customer expectations. Additionally, Shea and Parayitam (2019) and Katrodia et al. (2018) link customer satisfaction to the assessment of decisive and actual results, desire, need satisfaction and valuation of consumption experiences. Satisfied customers are likely to continue with the business and consume an assortment of products and services offered by a firm (De Matos et al., 2018; Machado, 2019). Kim et al. (2015) indicated that satisfied customers purchase additional services or products and stay longer with a business. Businesses work toward improving the quality of service to guarantee that consumers are contented (Peng & Moghavvemi, 2015; Uddin et al., 2018).

Caricati et al. (2016) suggest that the overall business success pivots on improved customer satisfaction. At universities, customer satisfaction is considered to be a critical strategy which can be achieved through providing service delivery that is above expectations, fulfilling promises and offering excellent programmes (Bahadur et al., 2018). If the standard of service delivery meets their needs, university customers become happy. Customer satisfaction within universities is determined by the provision of superior service quality and it further influences job performance. Thus, customer satisfaction is an important aspect of the higher education sector because it results from superior service quality and it further enunciates improved job performance (Koris et al., 2015; Nauffal & Skulte-Ouaiss, 2018).

### **3.4 Customer loyalty**

Customer loyalty, as a construct, has been extensively studied in services marketing with various definitions proposed (Iskhakova et al., 2020; Zaini et al., 2020). Other researchers (Kandampully et al., 2015; Kim et al., 2015; Makanyeza, 2015; Makanyeza & Chikazhe, 2017) claim that customer loyalty has much to do with both attitudinal and behavioural aspects than those concentrating only on the behavioural component of the concept. Kim et al. (2015) are of the idea that customer loyalty is the commitment to rebuy and repatronise products and services frequently, notwithstanding marketing efforts and situational influences. Rostami et al. (2019) agree with Kim et al. (2015) that retaining customers leads to improved business performance since loyal customers do not shift to competitors' offerings. Additionally, customer loyalty results from superior service quality (Caricati, 2016). Customer loyalty can be measured through customers talking positive things about an organisation, encouraging others to conduct business with certain institutions and patronising an organisation (Ali et al., 2016; Kim et al., 2015).

As regards to universities, customers (graduates) become loyal to their former training institutions only after they are equipped with relevant skills and are performing well in the workplace (De Matos et al., 2018). Additionally, graduates are loyal to their former universities only when the level of service delivery is above what they expect

(Ushantha & Kumara, 2016). Customer loyalty promotes the relationship between the perceived quality of service and perceived job efficiency (Kunanusorn & Puttawong, 2016; Zaini et al., 2020).

#### 4. DEVELOPMENT OF RESEARCH HYPOTHESES AND RESEARCH MODEL

The relationship between service quality, perceived job performance, customer satisfaction and customer loyalty has been tested and confirmed in earlier studies (Ali et al., 2016; Annamdevula & Bellamkonda, 2016; Chikazhe et al., 2020; Makanyeza & Chikazhe, 2017; Machado, 2019; Plantilla, 2017; Ushantha & Kumara, 2016; Zaini et al., 2020).

Previous studies have also proved that service quality has a positive influence on job performance (Jung & Lee, 2016; Bhatti et al., 2017; Borgogni et al., 2017; Hodgman, 2018; Chikazhe et al., 2020). Bhatti et al. (2017) settled that service quality positively influences workers' job performance. Similar results were established in a study by Kyoong and Park (2007) that service quality positively impacts job performance. Also, Bhatti et al. (2017) proved that service quality has a positive influence on satisfaction. Moreover, Gupta (2016) established that service quality has a positive effect on satisfaction. A study by Kaura et al. (2015) concluded that service quality positively influences employees' job performance. The results of a study by Kaura et al. (2015) concur with those by Ali et al. (2016) who settled that service quality has a positive effect on workers' job performance. Furthermore, Kassim and Abdullah (2010) established that customer satisfaction influences job performance. None of the previous studies has paid attention to customer satisfaction as a mediator of the effect of perceived service quality on perceived job performance. Therefore, it makes sense to predict that customer satisfaction plays a mediating role in the effect of perceived service quality on perceived job performance. Thus, it is hypothesised that:

*H1: Customer satisfaction mediates the effect of perceived service quality on perceived job performance.*

Literature has confirmed a positive relationship between service quality and job performance (Jung & Lee, 2016; Bhatti et al., 2017; Borgogni et al., 2017; Hodgman, 2018; Chikazhe et al., 2020). Moreover, Kim et al. (2015) approved that service quality has a positive effect on customer loyalty. Additionally, Ali et al. (2016) and Makanyeza and Chikazhe (2017) also settled that service quality influences customer loyalty. Likewise, studies by Encinas Orozco and Cavazos Arroyo (2017), Chikazhe et al. (2020) and Iskhakova et al. (2020) concluded that customer loyalty has a positive effect on employee performance. It is clear from this discussion that the literature did not consider the mediating customer loyalty as a mediator of the effect of perceived service quality on perceived job performance. Thus, it is hypothesised that:

*H2: Customer loyalty mediates the effect of perceived service quality on perceived job performance.*

Based on the foregoing hypotheses, the following research model is proposed: -

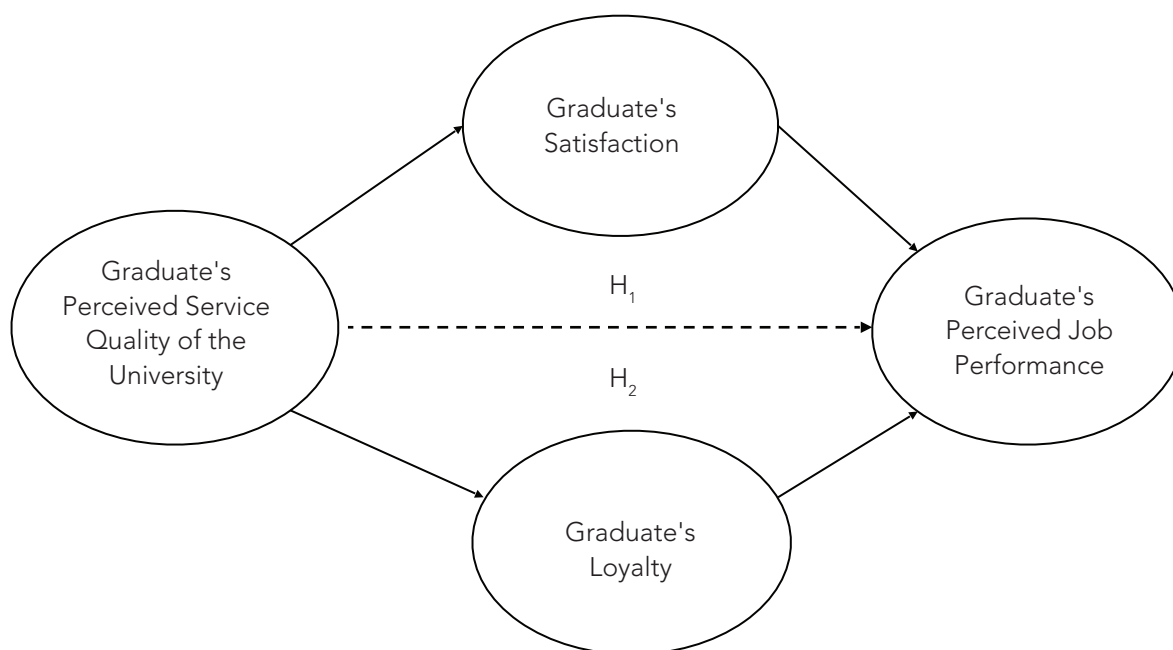


Figure 1: Research model



## 5. RESEARCH METHODOLOGY

### 5.1 Questionnaire design and measures

A structured questionnaire was designed with five sections, i.e., perceived service quality (PSQ), customer satisfaction (SAT), customer loyalty (LOY), perceived job performance (PJP) and demographics were used to collect data. A Likert scale that ranged from 1 (Strongly disagree) to 5 (Strongly agree) was used in measuring items under each construct. Items under each construct were borrowed from previous studies and they were modified to suit the requirements of the current study. The items for PSQ, PJP, SAT and LOY focused on perceptions of university graduates.

Reliability encompassed items like the university's ability to provide service right the first time, provision of error-free statements, responding to clients as promised and offering uniform service at all times. Assurance focussed on the academic area and covered academic aspects such as staff possessing required knowledge and experience, and the university's provision of up to date and appropriate learning materials. Assessment of tangibles measured the availability of modern learning materials at the university, state of the environment, staff appearance and the university's infrastructure. On empathy, the instrument evaluated courtesy of managerial employees, considering customer needs, delivery of dependable service and the ability of staff to address customer problems. Items measured under responsiveness were: the universities' ability to respond to customer queries, how easy it is to access university staff, the convenience of the university's service points and prompt service offered by university staff. Customer satisfaction was measured using customer expectations, promise fulfilment, provision of adequate service and availability of excellent programmes (Plantilla, 2017). Loyalty measurement items comprised repeated purchases of service, preaching a positive image of the institution, encouraging others to enrol with the university and patronising the institution (Encinas Orozco & Cavazos Arroyo, 2017; Makanyeza & Chikazhe, 2017). Perceived job output was assessed by the graduates' own evaluation of the ability to put expertise into practice, to work with or without minimal supervision, to understand the field of specialisation and to be a source of knowledge within the organisation (Abas & Imam 2016; Plantilla, 2017).

### 5.2 Sampling and data collection

The target population comprised university graduates working in Harare Metropolitan Province. Harare was selected because of the high number of businesses employing many university graduates (Zimstats, 2018). A positivist research philosophy was adopted. A deductive approach was also used because it creates hypotheses based on an existing theory and then builds a research strategy to test it (Saunders et al., 2009). A non-random sampling technique was employed, with a purposive sampling method being used to select university graduates who participated in the study. A cross-sectional survey design was used to collect data and 580 self-administered structured questionnaires were distributed to respondents with the help of managerial staff and human resource personnel from selected companies. Respondents were given up to five working days to respond, upon which the questionnaires were collected. Out of a total of 580 distributed questionnaires, 571 questionnaires were returned and usable. This gives a response rate of 98.4%. This response rate was deemed acceptable (Silverman, 2013).

The sample profile shows that respondents who were aged between 40 and 49 years constituted 47%. The study had more male participants (62%) than females (38%). Among university graduates who were selected to participate in the study, 58% studied as conventional students, 29% were block release and part-timers constituted 13%. Graduates who completed studies between 2011 and 2015 formed a greater part (49%) of respondents. Graduates engaged as permanent employees constituted the majority (75%) of participants. In terms of the period of employment, the study had 39% of total graduates employed for a period between 5 to 10 years. University graduates with up to a bachelor's degree qualification constituted 61% of participants followed by a master's degree with 33% and lastly doctoral graduates with 6%.

## 6. ANALYSIS AND RESULTS

### 6.1 Scale validation

Data validation was conducted using exploratory factor analysis (EFA), convergent validity and discriminant validity prior to performing structural equation modelling. SPSS® version 22 and AMOS® version 21 were the two packages used to analyse data. Kaiser-Meyer Olkin (KMO) measure and Bartlett's Test of Sphericity were used to decide sample adequacy. Results from exploratory factor analysis indicated that the sample was enough (KMO = .944, Approx. Chi-Square = 16607.166, Degree of Freedom = 595,  $p < 0.001$ ). The results satisfied minimum conditions as recommended by Field (2009) that Bartlett's Test of Sphericity should be significant at  $p < 0.05$ . Factor analysis was conducted by means of Varimax Rotation and the Rotation converged in 23 iterations with 70.590% being the total variance explained by the data. As expected, the solution gave 8 components, i.e. responsiveness (RESP),

reliability (REL), assurance (ASS), tangibility (TAN), empathy (EMP), satisfaction (SAT), loyalty (LOY) and perceived job performance (PJP). Items REL3, RES3 and RES4 were deleted as a result of factor loadings below 0.6 (Bagozzi & Yi, 1988).

As regards the estimation of the measurement model, the study adopted Maximum Likelihood Estimation (MLE) (Field, 2009). In determining convergent validity, model fit indices, standardised factor loadings, reliability, critical ratios and average variance extracted (AVE) were considered. Measurement model fit indices measured were CMIN/DF ( $\chi^2/DF$ ), Goodness of Fit Index (GFI), Adjusted GFI (AGFI), Normed Fit Index (NFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI) and Root mean square error of approximation (RMSEA). The values of GFI, AGFI, NFI, TLI and CFI specify a good fit if they are nearer to 1, and RMSEA must be less than .08 for it to be acceptable (Reisinger & Mavondo, 2007). Results obtained from the analysis suggest that convergent validity conditions were fulfilled. The measurement model showed a good fit (CMIN/DF 2.606; GFI .95; AGFI .924; NFI .948; TLI .946; CFI .952; RMSEA .046). Hooper et al. (2008) recommend that a good model must show a  $\chi^2/DF$  that falls within the scale of 0-5 with minor values indicating a better fit.

All constructs showed Cronbach's alpha ( $\alpha$ )'s and composite reliabilities with a cut-off point of above 0.6. All items indicated standardised factor loadings ( $\lambda$ ) beyond the cut-off point of 0.6 as recommended by Fornell and Larcker (1981). Critical ratios (CRs) were appropriately big and significant at  $p < 0.001$ . All constructs satisfied minimum necessity conditions since they had AVEs greater than 0.5 as recommended by Bagozzi and Yi (1988).

## 6.2 Discriminant validity

Discriminant validity was measured by matching average variance extracted (AVEs) against squared inter-construct correlations (SICCs). Conditions vital for discriminant validity were fulfilled as all AVEs were larger than matching SICCs (McQuitty & Wolf, 2013). Edward (2013) maintains that relationships between concepts have to be less than 0.9 so that they are different from each other.

## 6.3 Testing research hypotheses

Hypothesised relationships ( $H_1$  and  $H_2$ ) were established using structural equation modelling in SPSS 22 using the MLE method. Structural equation modelling was an ideal technique as it allows the determination of associations and establishment of whether or not there is a general fit between observed data and the research model (Segars, 1997). The structural model fit indices indicate satisfactory results i.e. (CMIN/DF 2.208; GFI .951; AGFI .934; NFI .958; TLI .956; CFI .959; RMSEA .044) (Fornell & Larcker, 1981; Reisinger & Mavondo, 2007). The results of the hypotheses tests are illustrated in Table 1 below:

Table 1: Hypothesis test results

HYPOTHESIS	PATH	PATH COEFFICIENT	DESCRIPTION	COMMENT
H1	PSQ → SAT → PJP	0.353***	SAT partially mediates the effect of PSQ on PJP	$H_1$ is supported
H2	PSQ → LOY → PJP	0.364***	LOY partially mediates the effect of PSQ on PJP	$H_2$ is supported
Note: ***Significant at $p < 0.001$				

Results in Table 1 indicate that both customer satisfaction and loyalty partially mediate the relationship between the relationship perceived service quality and perceived job performance. Therefore,  $H_1$  and  $H_2$  were both supported.

## 7. DISCUSSION AND IMPLICATIONS

The results of the study have effects on practice, theory and future research.

### 7.1 Theoretical implications

In the higher education sector, studies focusing on the mediating function of consumer satisfaction and loyalty to the relationship between perceived quality of service and perceived job performance are scarce. Therefore, the study aimed to add to the body of knowledge of marketing services and organizational behaviour by exploring



the mediating role of customer satisfaction and loyalty in the relationship between perceived quality of service and perceived job performance.

The study showed that a major correlation existed between the perceived quality of service and the perceived performance of the work. The study finding is supported by previous studies that established direct relationships between service quality and work performance (Abdullah et al., 2021; Nauffal & Skulte-Ouais, 2018; Rahman et al., 2020). Thus, the work performance of university graduates is influenced by the superior service offered by universities. This implies that highly qualified graduates who perform well at work are produced by universities providing superior service. Highly qualified graduates are those who, as the employer needs, are fitted with modern skills. They also satisfy the needs of employers, while putting theory into effect, becoming self-directed and displaying the skills required for the roles they command. Superior service quality demands universities to raise service delivery and produce graduates without employability and performance challenges. It is therefore the duty of university authorities to guarantee that service quality dimensions like assurance, responsiveness, reliability and empathy are improved. The findings of the study add to the services marketing of knowledge as there are no studies in the public domain addressing this phenomenon.

The study settled that the relationship between perceived service quality and perceived job performance is mediated by customer satisfaction. Prior studies also confirmed direct relationships between customer satisfaction, perceived service quality and job performance (Abdullah et al., 2021; Ali et al., 2016; Hodgman, 2018; Kyoon & Ah Park, 2007). The findings suggest that customer satisfaction plays an important role in the relationship between the perceived quality of service and the perceived job performance. The findings also indicate that the influence of perceived service quality on perceived job performance is partly mediated by consumer loyalty. Results suggest that consumer loyalty plays a key role in the relationship between perceived service quality and perceived job performance. This means that if universities improve the delivery of services, the loyalty of graduates is increased and this contributes to improved perceived job results. These findings add to the existing body of services marketing and organizational behaviour literature.

## 7.2 Practical implications

In order to improve the job performance of their graduates, it is recommended that universities pay special attention to improving service quality, customer satisfaction and loyalty. Thus, universities are recommended to raise service delivery levels through revision of admission qualifications for first-year students, enrolling manageable numbers to improve the student-lecturer ratio, reviewing attachment period for students and facilitating attachment of students to reputable firms. Universities are also advised to increase the satisfaction of customers by continuous review of degrees on offer to respond to the changing demand of the market, continuous training of academic staff, training and the provision of secure internet services for students (Encinas, 2017; Peng & Moghavvemi, 2015). It is also proposed that universities introduce loyalty schemes through the exemption of similar courses for graduates planning to pursue further studies at the same universities, and the elimination of tuition fees for graduates opting to pursue further studies at the same university. Improving alumni associations and maintaining a graduate database to stay in touch with former students are some of the steps that universities should take to boost customer loyalty.

## 7.3 Future research implications

The study sample was confined to Harare metropolitan province only. Thus, the generalisation of results may be difficult. Future research could be improved by extending related studies to other cities within and outside Zimbabwe.

## References

- Abas, M.C. & Imam, O.A. (2016). Graduates' Competence on Employability Skills and Job Performance. *International Journal of Evaluation and Research in Education*, 5(2): 119-125. Available at: <http://iaesjournal.com/online/index.php/IJERE>
- Abdullah, M. I., Huang, D., Sarfraz, M., Ivascu, L. & Riaz, A. (2021). Effects of internal service quality on nurses' job satisfaction, commitment and performance: Mediating role of employee well-being. *Nursing Open*, 8(2): 607-619.
- Akinci, S., Kiyimalioğlu, A. & Atilgan Inana, E. (2015). How golf players' satisfaction from golf experience predicts their loyalty intentions? Mediating role of perceived value. *International Journal of Culture, Tourism and Hospitality Research*, 9(2): 117-132. Available at: <https://doi.org/10.1108/IJCTHR-04-2014-0033>
- Akoto, E.O. & Akoto, E.V. (2019). Why interpersonal bonds may supersede organisational commitment on performance: an integrative motivational view. *International Journal of Applied Management Science*, 11(3): 210-223.

- Al Ali, H.A., Elanain, H.M.A. & Ajmal, M. (2016). Knowledge-sharing behaviour as a mediator of the relationship between organisational justice and organisational performance in the UAE. *International Journal of Applied Management Science*, 8(4):290-312. Available at: <https://doi.org/10.1504/IJAMS.2016.080319>
- Ali, F., Zhou, Y., Hussain, K., Nair, P.K. & Ragavan, N.A. (2016). Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysian public universities. *Quality Assurance in Education*, 24(1): 70-94. Available at: <https://doi.org/10.1108/QAE-02-2014-0008>
- Annamdevula, S. & Bellamkonda, R.S. (2016). Effect of student perceived service quality on student satisfaction, loyalty and motivation in Indian universities: development of HiEduQual. *Journal of Modelling in Management*, 11(2): 488-517. Available at: <https://doi.org/10.1108/JM2-01-2014-0010>
- Bagozzi, R.P. & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1): 74–94.
- Bahadur, W., Aziz, S. & Zulficar, S. (2018). Effect of employee empathy on customer satisfaction and loyalty during employee–customer interactions: The mediating role of customer affective commitment and perceived service quality. *Cogent Business & Management*, 5(1): 1-21. <https://doi.org/10.1080/23311975.2018.1491780>
- Belwal, R., Priyadarshi, P. & Al Fazari, M.H., (2017). Graduate attributes and employability skills: Graduates' perspectives on employers' expectations in Oman. *International Journal of Educational Management*, 31(6): 814-827. Available at: <https://doi.org/10.1108/IJEM-05-2016-0122>
- Bhatti, M.A., Juhari, A.S., Piaralal, S.K. & Piaralal, N.K. (2017). Knowledge workers job performance: An examination of career values, perceived organizational support and career satisfaction. *Business and Management Horizons*, 5(2): 13-35. Available at: <http://dx.doi.org/10.5296/bmh.v5i2.12138>
- Borgogni, G., Latham, L. & Gary P. (2017). A Dynamic model of the longitudinal relationship between job satisfaction and supervisor-rated job performance. *Alessandri, Applied Psychology: An International Review*, 66(2): 207-232. Available at : <https://doi.org/10.1111/apps.12091>
- Caricati, L., Chiesa, R., Guglielmi, D. & Mariani, M.G. (2016). Real and perceived employability: a comparison among Italian graduates. *Journal of Higher Education Policy and Management*, 38(4): 490-502. Available at: <https://doi.org/10.1080/1360080X.2016.1182668>
- Chaudhuri, K. & Oba, H. (2016). An empirical study on commitments of Japanese employees. *International Journal of Applied Management Science*, 8(4): 313-337. Available at: <https://doi.org/10.1504/IJAMS.2016.10001209>
- Chikazhe, L., Makanyeza, C. & Kakava, N.Z. (2020). The effect of perceived service quality, satisfaction and loyalty on perceived job performance: perceptions of university graduates. *Journal of Marketing for Higher Education*, 32(1) 1-18. <https://doi.org/10.1080/08841241.2020.1793442>
- Choudhury, K. (2015). Evaluating customer-perceived service quality in business management education in India: A study in topsis modelling. *Asia Pacific Journal of Marketing and Logistics*, 27(2): 208-225. Available at: <https://doi.org/10.1108/APJML-04-2014-0065>
- De Matos, P. E., Alves, H. & Leitao, J. (2018). Does the quality of academic life mediate the satisfaction, loyalty and recommendation of HEI students? *International Journal of Educational Management*. 32(5), pp. 881-900. Available at: <https://doi.org/10.1108/IJEM-04-2017-0086>
- Edward, S.T.W. (2013). The influence of visual packaging design on perceived food product quality, value, and brand preference. *International Journal of Retail & Distribution Management*, 41(10): 805-816.
- Encinas O. F. C., & Cavazos A. J. (2017). Students' loyalty in higher education: the roles of affective commitment, service co-creation and engagement. *Cuadernos de Administración (Universidad del Valle)*, 33(57): 96-110. Available at: <http://dx.doi.org/10.25100/cdea.v33i57.4464>
- Espinoza, O., McGinn, N., González, L., Sandoval, L. & Castillo, D. (2019). Education and employment in two Chilean undergraduate programs. *Education+ Training*, 61(3). Available at: <https://doi.org/10.1108/ET-06-2018-0131>
- Field, A. (2009) *Discovering Statistics Using SPSS*. 3<sup>rd</sup> Edition, Sage Publications Ltd., London
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1): 39-50. Available at: <https://doi.org/10.1177/002224378101800104>
- Guilbault, M. (2016). Students as customers in higher education: reframing the debate. *Journal of Marketing for Higher Education*, 26(2): 132-142. Available at: <https://doi.org/10.1080/08841241.2016.1245234>

- Gupta, A. (2016). Service quality and delivery in banking services—An Indian perspective. *Cogent Business & Management*, 3(1): 1-14
- Gwinji, W.A., Chiliya, N., Chuchu, T. & Ndoro, T. (2020). An application of internal marketing for sustainable competitive advantage in Johannesburg construction firms. *African Journal of Business and Economic Research*, 15(1): 183-200.
- Hattingh, C., de Waal, A. & Parsons, P. (2018). Assessing high performance: A South African case study. *South African Journal of Business Management*, 49(1): 1-8.
- Hodgman, M.R. (2018). Employers perspectives on the performance of higher education institutions in preparing graduates for the workplace: A review of the literature. *Business and Economic Research*, 18(3): 92-103.
- Hooper, D., Coughlan, J. & Mullen, M. (2008). Structural equation modelling: guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1): 53-60.
- Iskhakova, L., Hilbert, A. & Joehnk, P. (2020). Cross-cultural research in alumni loyalty: An empirical study among master students from German and Russian Universities. *Journal of Nonprofit & Public Sector Marketing*, 33(4). 1-36. Available at: <https://doi.org/10.1080/10495142.2020.1760995>
- Jawaad, M., Amir, A., Bashir, A. & Hasan, T. (2019). Human resource practices and organizational commitment: The mediating role of job satisfaction in emerging economy. *Cogent Business & Management*, 6(1): 1-45. Available at: <https://doi.org/10.1080/23311975.2019.1608668>
- Jung, J. & Lee, S.J. (2016). Influence of university prestige on graduate wage and job satisfaction: the case of South Korea. *Journal of Higher Education Policy and Management*, 38(3): 297-315. Available at: <https://doi.org/10.1080/1360080X.2016.1174408>
- Kandampully, J., Zhang, T. & Bilgihan, A. (2015). Customer loyalty: a review and future directions with a special focus on the hospitality industry. *International Journal of Contemporary Hospitality Management*, 27(3): 379-414. Available at: <https://doi.org/10.1108/IJCHM-03-2014-0151>
- Kassim, N. & Abdullah, A. N. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: A cross cultural analysis. *Asia Pacific Journal of Marketing and Logistics*, 22(3): 351-371.
- Katrodia, A., Naude, M.J. & Soni, S. (2018). Determinants of shopping and buying behaviour: a case at Durban shopping malls. *African Journal of Business and Economic Research*, 13(1): 219-241.
- Kaura, V., Durga Prasad, C.S. & Sharma, S. (2015). Service quality, service convenience, price and fairness, customer loyalty, and the mediating role of customer satisfaction. *International Journal of Bank Marketing*, 33(4): 404-422. Available at: <https://doi.org/10.1108/IJBM-04-2014-0048>
- Kim, M., Vogt, C.A. & Knutson, B.J. (2015). Relationships among customer satisfaction, delight, and loyalty in the hospitality industry. *Journal of Hospitality & Tourism Research*, 39(2): 170-197.
- Koris, R., Örténblad, A., Kerem, K. & Ojala, T. (2015). Student-customer orientation at a higher education institution: The perspective of undergraduate business students. *Journal of Marketing for Higher Education*, 25(1): 29-44. Available at: <https://doi.org/10.1080/08841241.2014.972486>
- Kunanusorn, A. & Puttawong, D. (2015). The Mediating effect of satisfaction on student loyalty to higher education institution. *European Scientific Journal* (Special Edition), 1(1): 449-463.
- Yoo, D. K. & Park J.A. (2007). Perceived service quality: Analysing relationships among employees, customers, and financial performance. *International Journal of Quality & Reliability Management*, 24(9): 908-926. Available at: <https://doi.org/10.1108/02656710710826180>
- LeMahieu, P.G., Nordstrum, L.E. & Greco, P. (2017). Lean for education. *Quality Assurance in Education*, 25(1): 74-90. Available at: <https://doi.org/10.1108/QAE-12-2016-0081>
- Machado, M.J.C.V. (2019). Determinants of customer satisfaction: empirical study in hotels. *International Journal of Applied Management Science*, 11(2): 91-112.
- Makanyeza, C. (2015). Consumer awareness, ethnocentrism and loyalty: An integrative model. *Journal of International Consumer Marketing*, 27(2): 167-183. Available at: <https://doi.org/10.1080/08961530.2014.980927>
- Makanyeza, C. & Chikazhe, L. (2017). Mediators of the relationship between service quality and customer loyalty: Evidence from the banking sector in Zimbabwe. *International Journal of Bank Marketing*, 35(3): 540-556. Available at: <https://doi.org/10.1108/IJBM-11-2016-0164>

- Martin, M. & Parikh, S. (2017). *Quality management in higher education: Developments and drivers from an international survey*. Paris: International Institute for educational planning.
- McQuitty, S. & Wolf, M. (2013). Structural equation modelling: A practical introduction. *Journal of African Business*, 14 (1): 58–69.
- Monica, C. (2017). Service learning for improvement of customer service education in LIS. *Education for Information*, 33(3): 171-185. Available at: <https://doi.org/10.3233/EFI-160096>
- Muchemwa, S. (2017). University Quality Assurance in Zimbabwe: A Case of Solusi University. *International Journal of Social Sciences and Educational Studies*, 4(1): 93-103.
- Mukucha, P., Manyika, T., Madhuku, G. & Chari, F. (2020). The effects of business process outsourcing on the quality of catering services in tertiary education industry in Zimbabwe. *Cogent Business & Management*, 7(1): 1-11.
- Mwiya, B., Siachinji, B., Bwalya, J., Sikombe, S., Chawala, M., Chanda, H., Kayekesi M., Sakala, E, Muyenga, D. & Kaulungombe, B. (2019). Are there study mode differences in perceptions of university education service quality? Evidence from Zambia. *Cogent Business & Management*, 6(1): 1-19. Available at: <https://doi.org/10.1080/23311975.2019.1579414>
- Nauffal, D. & Skulte-Ouaiss, J. (2018). Quality higher education drives employability in the Middle East. *Education+ Training*, 60(9). Available at: <https://doi.org/10.1108/ET-05-2017-0072>
- Newman, A., Cooper, B., Holland, P., Miao, Q. & Teicher, J. (2019). How do industrial relations climate and union instrumentality enhance employee performance? The mediating effects of perceived job security and trust in management. *Human resource management*, 58(1): 35-44.
- Peng, L.S. & Moghavvemi, S. (2015). The dimension of service quality and its impact on customer satisfaction, trust, and loyalty: A case of Malaysian banks. *Asian Journal of Business and Accounting*, 8(2): 91-121.
- Plantilla, A. M. (2017). Graduates Performance in the Workplace: Employers' Perspective. *Asia Pacific Journal of Multidisciplinary Research*, 5(2): 186-198.
- Qureshi, M. A., Qureshi, J. A., Thebo, J. A., Shaikh, G. M., Brohi, N. A. & Qaiser, S. (2019). The nexus of employee's commitment, job satisfaction, and job performance: An analysis of FMCG industries of Pakistan. *Cogent Business & Management*, 6(1): 1-18.
- Rahman, A., Björk, P. & Ravald, A. (2020). Exploring the effects of service provider's organizational support and empowerment on employee engagement and well-being. *Cogent Business & Management*, 7(1): 1-19. Available at: <https://doi.org/10.1080/23311975.2020.1767329>
- Rajicet, T., Nikolić, I. & Milošević, I. (2019). An integrative model of relationship quality in higher education setting: Evidence from Serbia. *Industrija*, 47(2): 43-59.
- Reisinger, Y. & Mavondo, F. (2007). Structural equation modelling. *Journal of Travel and Tourism Marketing*, 21(4): 41-71.
- Rostami, M., Ahmadian, L., Jahani, Y. & Niknafs, A. (2019). The effect of patient satisfaction with academic hospitals on their loyalty. *The International journal of health planning and management*, 34(1): e726-e735.
- Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research Methods for Business Students*. 6<sup>th</sup> ed London: Pearson.
- Segars, A. (1997). Assessing the unidimensionality of measurement: a paradigm and illustration within the context of information systems research. *Omega International Journal of Management Science*, 25(1): 107-121. Available at: [https://doi.org/10.1016/S0305-0483\(96\)00051-5](https://doi.org/10.1016/S0305-0483(96)00051-5)
- Shea, T. & Parayitam, S. (2019). Antecedents of graduate student satisfaction through e-portfolio: Content analysis. *Education+ Training*, 61(9). Available at: <https://doi.org/10.1108/ET-04-2019-0064>
- Silverman, D. (2013). *Doing qualitative research: A practical handbook*. London: Sage.
- Singh, K. (2016). Influence of internal service quality on job performance: a case study of Royal Police Department. *Procedia-Social and Behavioral Sciences*, 224: 28-34. Available at: <https://doi:10.1016/j.sbspro.2016.05.396>
- Solimun, S. & Fernandes, A.A.R. (2018). The mediation effect of customer satisfaction in the relationship between service quality, service orientation, and marketing mix strategy to customer loyalty. *Journal of Management Development*, 37(1), 76-87. Available at: <https://doi.org/10.1108/JMD-12-2016-0315>

- Tseane-Gumbi, L. (2019). Assessing the economic implications of business social responsibility and sustainability in South Africa's tourism industry. *African Journal of Business and Economic Research*, 14(4): 27-51.
- Uddin, M., Ali, K. & Khan, M.A. (2018). Impact of service quality (SQ) on student satisfaction: empirical evidence in the higher education context of emerging economy. *AL-'ABQARI: Journal of Islamic Social Sciences and Humanities*, 16: 31-67.
- Ushantha, C. R.A. & Kumara, S. P.A.P. (2016). A quest for service quality in higher education: Empirical evidence from Sri Lanka. *Services Marketing Quarterly*, 37(2): 98-108. Available at: <https://doi.org/10.1080/15332969.2016.1154731>
- Zaini, B.J., Mansor, R., Yusof, N. & Sarkawi, N. (2020). Satisfaction and loyalty model for university students based on industrial revolution 4.0 management. *Journal of Talent Development and Excellence*, 12(2s): 1087-1100. Available at: <http://creativecommons.org/licenses/by-nc-nd/4.0/>
- Zakaya, R. (2020). Determinants of business companies' economic performance in Burkina Faso. *African Journal of Business Management*. 14(1), 35-52.
- Zeithaml, V. A. & Bitner, M. J. (2013). *Services marketing*. 6<sup>th</sup> ed. Massachusetts: Mc Graw Hill.
- Zimstats, (2018). *Quarterly digest of statistics*, Third Quarter 2018.





# ENTREPRENEURIAL RESOURCES AND ENGAGEMENT OF AFRICAN ACADEMICS: EVIDENCE FROM NIGERIA

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## Abstract:

The objective of this study is to empirically examine African academics' entrepreneurial resources and engagement using a leading Nigerian university in order to evaluate the speculation that African academics lack entrepreneurial capabilities to engage in knowledge discovery and commercialisation, as well as to develop an understanding of the entrepreneurship gap in African universities. A cross-sectional survey and validated scales were used to collect data from 298 randomly selected academics from the university's 79 departments and 12 faculties. Descriptive and inferential analyses using mean scores and standard deviations of academics on the study variables, as well as regression analysis, were conducted to test the hypotheses. Contrary to expectations, academics have the necessary entrepreneurial resources to engage in entrepreneurial activities, but as speculated, the level of their entrepreneurial engagement is low. The study adds to the body of knowledge on academic entrepreneurship and makes recommendations to improve African academic entrepreneurial engagement. The limitations of the study and future research directions were discussed.

**Keywords:** *African academic entrepreneurship, entrepreneurial resources, entrepreneurial engagement, knowledge transfer, and research commercialisation.*

## Introduction

Since the passage of the Bayh-Dole Act, also known as the University and Small Business Patent Procedures Act, in 1980, which allowed US universities to use public funds for research and commercialise research knowledge, there has been an increase in industry-relevant research and university-industry partnerships for knowledge and technology transfer. Similar legal frameworks implemented in many developed economies in Europe, Asia, and Australia resulted in structural and strategic policy changes, as well as other entrepreneurial capabilities and engagement with stakeholders outside the academic environment (Zhao, Broström, & Cai, 2020; Etzkowitz, 2003). This new role, known as university ambidexterity, implies the dynamic capabilities of universities, academic departments, and scientists to successfully combine the traditional roles of teaching and research with research commercialisation activities (Chang, Yang, Martin, Chi, & Tsai-Lin, 2016).

Many decades after universities in developed economies transitioned to entrepreneurial universities through the establishment of entrepreneurial infrastructures (Huyghe & Knockaert, 2015) and the development of academic

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entrepreneurial dispositions (D'Este & Perkmann, 2011; Munshaw, Lee, Phan, & Marr, 2019), concerns have been expressed about African academics and universities' entrepreneurial capabilities to engage successfully and productively with the industry (Bamiro, 2004; Bogoro, 2015; Sá, 2014). Only a few Nigerian academics produce research products that can be used for societal development (Oduwaiye, Owolabi, & Onasanya, 2009; OECD, 2013). While good research thrives in many Nigerian universities, much of it with industrial relevance and marketable breakthroughs, the rate of commercialisation is very low, according to Jones, Bailey, and Lyytikäinen (2007) and Munyoki, Kibera, and Ogutu (2011). Similarly, Fadeyi, Maresova, Stemberkova, Afolayan, and Adeoye (2019) report that between 2010 and 2017, only 3% of Nigerian businesses sourced their innovation from universities.

Several reasons have been advanced to explain African academics' and universities' lack of entrepreneurial capabilities. According to Bogoro (2015) and Atuahene (2011), most academics are engrossed in traditional scientific norms, standards, and values and conduct research for publication purposes only, rather than for knowledge transfer purposes. According to Jones et al. (2007), the cause is a lack of entrepreneurial capabilities at both the individual and institutional levels. According to Wagner, Brahmakalum, Jackson, Yoda, and Wong (2001), most African countries are scientific laggards with low innovation and university-industry partnerships as a result.

Despite these concerns and reports, few empirical efforts have been made to assess African academics' entrepreneurial capabilities in order to validate these claims. According to Clarysse, Tartari, and Salter (2011), the entrepreneurial capabilities of universities stem from entrepreneurial resourcefulness of academics, who are the primary agents that help build, promote, and breathe life into the entrepreneurial culture of departments and universities, as well as their willingness to engage in entrepreneurial practices. The objectives of this study are to assess entrepreneurial resourcefulness (innovativeness, motivation, and orientation) among Nigerian academics and examine the impact on their entrepreneurial engagement using a leading Nigerian university. This is a critical first step toward empirically investigating the concerns raised about academics' lack of entrepreneurial capacity and engagement, as well as developing a better understanding of Africa's academic entrepreneurship gap.

## **2. LITERATURE AND HYPOTHESES**

### **2.1 Academic Entrepreneurial Engagement (AEE)**

Miranda, Chamorro-Mera, and Rubio (2017) define academic entrepreneurship as a process where individuals or groups of individuals connected through their work to a university or research centre use knowledge generated in their research to establish businesses. Academic entrepreneurship entails commercialising scientific knowledge, which includes turning knowledge into products and processes that will invariably contribute to economic growth and innovation. According to De Silva (2012), academic entrepreneurship entails a broad spectrum of knowledge-transfer activities other than research, administration, and teaching and includes both formal and informal activities incorporating one or more knowledge-transfer activities, such as:

- engaging in external teaching and conducting seminars and training for industry (D'Este & Patel, 2007);
- consulting for the industry as a researcher in collaboration with or without the university;
- developing commercially viable products or services
- obtaining funding for research from government, non-government, or international organizations;
- collaborating with businesses and industries through joint research projects and research related assistance to small business owners (Siegel, Waldman, Atwater, & Link, 2004);
- engaging in knowledge transfer activities as joint partners with universities and industry, privately;
- establishing a joint venture(s) through industry collaboration
- facilitating the formation of spin-off companies;
- contributing to the establishment of university incubators and/or science parks;
- contributing to the establishment of university centres dedicated to commercialisation and the formation of their own businesses (Clarysse, Wright, Lockett, de Velde, & Vohora, 2005; Di Gregorio & Shane, 2003);
- engaging in contract research, and research output patenting (Mirani & Yusof, 2016; Ojo, Dorasamy, Migin, Jayabalan, Rajeswari, & Tung, 2022).

Because of their similarities and connections to teaching, research, and business creation, these activities overlap across groups. In this study, academic entrepreneurial engagement is used as a catch-all term for any of the above-mentioned formal and informal entrepreneurial activities.

### **2.2 Academic Entrepreneurial Resources (AERs)**

An entrepreneurial resource is defined by Mosakowski (1998) as the propensity of an individual to behave creatively, act with foresight, use intuition, and be alert to new opportunities, capturing the need for entrepreneurial resources.

Entrepreneurial alertness, insight, information, education, and experience (explicit and tacit knowledge) embodied in entrepreneurs, or their social networks are examples of such resources (Barney, 2018). An entrepreneurial resource is any specific resource that an individual possesses that increases the individual's proclivity to recognise and exploit the economic value of an opportunity.

According to the resource-based theory, resources can influence entrepreneurial decision-making by shaping the identification and consideration of new business opportunities and providing entrepreneurs with the ability to perform a wide range of entrepreneurial tasks (Mickiewicz, Nyakudya, Theodorakopoulos, & Hart, 2017). Human resources, in particular, have a large impact on both commercial and social entrepreneurial activity (Hörisch, Kollat, & Brieger, 2017; Kachlami, Yazdanfar, & Öhman, 2018; Brieger & De Clercq, 2018). In their entrepreneurial endeavours, entrepreneurs face a variety of challenges and significant uncertainty, but their human resources can improve their chances of overcoming these obstacles (Meyskens, Carsrud, & Cardozo, 2010).

#### *Academic Entrepreneurial Innovativeness (AEInn)*

Innovativeness, as an innate characteristic, encapsulates what it takes to be an entrepreneur. Individuals who are highly innovative have a proclivity and willingness to take risks, do things differently, handle multiple ideas concurrently, offer new perspectives on old problems, and find solutions when challenged. They are also more likely to be interested in innovative ventures and technologies and to pursue a career in creating new technological ventures (Salhieh & Al-Abdallat, 2022). The proclivity of an academic to engage in innovative and entrepreneurial practices is referred to as entrepreneurial innovativeness. Entrepreneurial innovativeness, according to Ertürk (2012), is a way of thinking and acting that facilitates the creation and development of values and attitudes, which may in turn encourage new ideas. Thus, entrepreneurial innovativeness is the ability and propensity to identify and transform new opportunities into new knowledge and new technology for the benefit of end users.

Entrepreneurial innovativeness is a valuable resource that university academics and scientists must have in order to actively seek out research opportunities that can be turned into value for the industry. Academics who are innovative are motivated by the desire to discover new research opportunities that can be commercialised. Academics lose their ability and proclivity to identify industry-relevant and value-added research opportunities in the absence of innovation, thus limiting their entrepreneurial engagement from the start. As a result, in order to explore and exploit the market value of research, academics must be able to recognise research opportunities and develop research ideas. In a study of prospective student entrepreneurs at 55 South Korean universities, Lee, Kang, and Kim (2022) demonstrated that innovativeness influences students' knowledge exploration and exploitation. Similarly, several studies involving academics also showed that innovativeness plays an important role in the entrepreneurial engagement of academics (Prónay & Buzás, 2015; Rizzo, 2015; D'Este, 2015).

#### *Academic Entrepreneurial Motivation (AEM)*

Academic entrepreneurial motivation is what drives academics to engage in entrepreneurial behaviour, such as forming businesses to capitalise on opportunities. Motivation, according to Edelman, Brush, Manolova, and Greene (2010), is a stimulus that converts latent entrepreneurial intention into action, establishing the link between intention and action. Thus, academic entrepreneurial motivation drives academic entrepreneurial intention and action. While intrinsic motivation refers to engaging in a task for the satisfaction it provides, extrinsic motivation refers to engaging in the task for some external benefit (Antonioli, Nicolli, Ramaciotti, and Rizzo, 2016; Rizzo, 2015). According to research, extrinsic and intrinsic motivations may have different effects on entrepreneurial engagement. For some academics, non-monetary incentives are a higher-order intrinsic motivation to engage in entrepreneurship (Azagra-Caro, Aznar-Marquez, & Blanco, 2008), whereas, for others, financial incentives are a higher-order extrinsic motivation (D'Este & Perkmann, 2011). Financial extrinsic factors include salary increases, lunch vouchers, and monetary benefits (Sormani, Baaken, & van der Silje, 2022), financial compensation (Iorio, Labory, & Rentocchini, 2017), and funding or financial resources (Orzabayeva, Davey, Plewa, & Galán-Muros, 2020).

Non-financial, intrinsic factors that have been found to motivate entrepreneurial engagement include the desire for independence (Shane, 2004), prestige and peer recognition (Dietz & Bozemann, 2005), and individual willingness to bring research into the market (Shane, 2004; Fini, Grimaldi, & Sobrero, 2009). Factors also include a desire to apply inventions in practice (Nilsson, Rickne, & Bengtsson, 2010), necessity, the need for industrial feedback about the application of their invention, the desire to assist in the resolution of societal and community problems (Rizzo, 2015), career advancement (e.g., increased chances of promotion and personal network expansion), recognition (e.g., by the HEI and peers), and research support (e.g., in funds and data) (Sormani, Baaken, & van der Silje, 2022; Orzabayeva, Davey, Plewa, & Galán-Muros, 2020; Arzenšek, Košmrlj & Širca, 2018). The extrinsic benefit is not



a major motivator for these types of academics. Thus, academics who engage in entrepreneurial activities are motivated by intrinsic or extrinsic motives or both.

#### *Academic Entrepreneurial Orientation (AEO)*

Individual entrepreneurial orientation can be defined as a person's inclination or attitude toward engaging in entrepreneurial behaviours (Wu, 2009; Okręglicka, Filipowicz, Betáková, 2021). With the definition of individual entrepreneurial orientation as a tendency held by individual employees of the organisation toward innovative, proactive, and risk-taking behaviours in the workplace by Covin, Rigtering, Hughes, Kraus, Cheng, and Bouncken (2020), three characteristics of entrepreneurial orientation have been identified as influencers of academics' commercial research conduct. Innovativeness is required for identifying and pursuing new opportunities, making it a key determinant of entrepreneurial action. Anticipating marketable research needs or addressing specific needs requires proactivity. Risk-taking is the act of taking bold and courageous steps toward making significant financial commitments to perceived profitable research, projects, and ventures with highly unpredictable outcomes.

Though individual entrepreneurial orientation has been linked to a business startup in a variety of contexts, its importance within the university is just emerging (Todorovic, McNaughton, & Guild, 2011). Despite growing awareness of entrepreneurial universities, little is known about the application of individual entrepreneurial orientation in academic entrepreneurial engagement, with the exception of a small body of evidence highlighting its importance in university spin-offs and research commercialisation (Diáñez-González & Camelo-Ordaz, 2016; Rashid & Ismail, 2014). According to Todorovic et al. (2011), this is due to its unsuitability for universities with different orientations, as well as cultural and work settings with business. However, as universities become more corporate, there is a greater need for increased use of entrepreneurial orientation to facilitate academics' entrepreneurial engagement in universities. Previous research showed that an academic's entrepreneurial and commercial orientation determines his or her proclivity to engage in entrepreneurial endeavours (Di Gregorio & Shane, 2003), knowledge creation (Vidic, 2013), exploring value-creating opportunities (Chaston & Scott, 2012), as well as commercialisation and success of starting a business among students (Ismail, Anuar, Omar, Aziz, Seohod, & Akhtar, 2015). Abidi, Nimer, Bani-Mustafa, and Toglaw (2022) enthused that faculty with entrepreneurial orientation can play a critical role in assisting their institutions in developing new academic programmes with potential market demand, interacting with industry, and developing innovative ideas and opportunities for growth and development. As a result, the ability of academics to conduct market-oriented or industry-relevant research necessitates an entrepreneurial mindset. As a result, a lack of entrepreneurial orientation can be a major impediment to entrepreneurial behaviour.

While most studies on the dispositional factors facilitating academic entrepreneurship have primarily focused on the scientists' demographic characteristics such as age, gender, seniority, prior commercialisation experience, entrepreneurship skills, entrepreneurship knowledge, and social norms (Perkmann, Tartari, McKelvey, Autio, Broström... Sobrero, 2013; Perkmann, Salandra, Tartari, McKelvey, & Hughes, 2021), our understanding of the scientists' entrepreneurial characteristics and resources and how these impact on their entrepreneurial engagement is still limited. It is argued that the assumption that African academics lack the ability to engage in research commercialisation, industry collaboration, knowledge, and technology transfer, spin-offs, and other entrepreneurial activities stems from a lack of these entrepreneurial resources. To test this assumption, the entrepreneurial resourcefulness (innovativeness, motivation, and orientation) of academics was assessed, and their predictive effects on academics' entrepreneurial engagement were explored. To accomplish this, the hypotheses are stated in the null form, which corresponds to the direction of the speculations. As a result, it is hypothesised that:

*Hypothesis 1:* Academics lack entrepreneurial resources (innovativeness, motivation, and orientation) necessary for entrepreneurial engagement.

*Hypothesis 2:* Academics engage in a low level of entrepreneurial activities.

*Hypothesis 3:* Academics' entrepreneurial resources (innovativeness, motivation, and orientation) do not have a significant impact on their entrepreneurial engagement.

### **3. RESEARCH METHODS**

#### **3.1 Participants and data collection procedure**

The study used a cross-sectional design and a survey method that is best suited for gathering data from a large heterogeneous population, such as a university academic population. This enabled highly valid and high-quality population-descriptive data to be collected. Quantitative survey instruments were distributed to 495 randomly selected participants from academic staff roll-calls in each of the 79 departments across 12 faculties, representing

38.05% of the university's 1301 academic staff population. Only even-numbered academics from each department's roll-call across diversities were chosen for the exercise. After 10 weeks of data collection, 298 early and late-career academics with tenure ranging from 5 to 30 years (60.2% of the sampled academics and 22.9% of the academic staff population) returned valid responses. The focal university is deemed most appropriate for the study due to its advantageous location in the country's industrial and commercial centre. This location offers excellent opportunities for academics and the university to pursue entrepreneurial endeavours. Similar studies (Antonioli et al., 2016; Urban & Chantson, 2017; Miranda, et al., 2017; Zhao et al., 2020; Acuña-Duran, Oyanedel, & Pradenas-Wilson, 2022) employed the same methodologies to investigate academics' entrepreneurial intention and engagement and reported response rates of 11% (Huyghe & Knockaert, 2015); 20% (Urban & Chantson, 2017); and 21% (Antonioli et al., 2016) of the total academic staff population.

## 3.2 MEASURES

**3.2.1 Academic Entrepreneurial Innovativeness (AEInn):** A 16-item scale adapted from Scott and Bruce's (1994) 6-item innovative work behaviour scale comprising idea generation, coalition building, and idea realisation dimensions; Sherman's (1999) unidimensional 14-item employee innovation behaviour scale; and Odetunde's (2019) 27-item employee innovativeness scale comprising creativity, innovation, and innovation adoption was used to assess academic entrepreneurial innovativeness. Cronbach alphas for the three scales were 0.89, 0.78, and 0.92, respectively. The scales were combined and adapted for this study.

**3.2.2 Academic Entrepreneurial Motivation (AEM):** Academic Entrepreneurial Motivation (AEM) was assessed using a 21-item scale composed of seven subscales of three items each, drawn from a variety of intrinsic and extrinsic factors identified in the academic entrepreneurial motivation literature. These are (1) achievement, challenge, and learning, which include motivation for meaningful work and responsibility, as well as motivation to learn through the challenge of starting and running a business and self-realisation; (2) income security and financial success, which capture financial returns; (3) recognition and status, which concern social status and the desire for recognition and respect; and (4) community and social motivations, which concern the desire to contribute (Aziz, Friedman, Bopievac, & Keles, 2013; Estrin, Mickiewicz, & Stephan, 2016; Friedman, Aziz, Keles, & Sayfullin, 2012; Jayawarna, Rouse & Kitching, 2013; Uddin & Kanti, 2013). Personal motives; motivation for research resources; funding for research; learning; financial benefits; peer recognition; and altruism and community development are the seven subscales.

**3.2.3 Academic Entrepreneurial Orientation (AEO):** An adapted version of Bolton and Lane's (2012) academic entrepreneurial orientation scale, which includes three subscales of risk-taking, innovativeness, and proactiveness, was used to assess academic entrepreneurial orientation (Cronbach alpha ranged between 0.765 and 0.800). Wu (2009) discovered a link between opportunity recognition and entrepreneurial orientation measures. Based on this, Wu's (2009) measure of opportunity recognition is adapted in this study as a dimension of entrepreneurial orientation. Given that the entrepreneurial orientation scale's dimension of innovativeness corresponds to a lesser extent to the entrepreneurial resources of innovativeness in this study, the current study's innovativeness scale investigates broader dimensions of entrepreneurial innovativeness as an entrepreneurial trait in and of itself, rather than just as a component of entrepreneurial orientation. As a result, the innovativeness dimension of the entrepreneurial orientation scale was dropped from this study in favour of the more distinct and comprehensive innovativeness scale. This study's academic entrepreneurial orientation scale has three dimensions: risk-taking (4 items), proactiveness (4 items), and opportunity recognition (4 items).

**3.2.4 Academic Entrepreneurial Engagement (AEE):** The scale of academic entrepreneurial engagement developed by De Silva (2012) was used to assess academic entrepreneurial activities. The scale assesses five types of entrepreneurial activities by academics within universities: (1) training and consultancy; (2) company formation by universities; (3) company formation by academics who do not have a university role in these companies; (4) collaboration with industry; and (5) academic teaching and research, such as developing new degree programmes, acquiring research funds, and part-time teaching with other higher education institutions. Several studies have used this scale to assess academics' entrepreneurial activities within universities (Mirani & Yusof, 2016).

A 7-point Likert response format ranging from 1 (to no extent/strongly disagree) to 7 (to a very great extent/strongly agree) was adopted for the scales.

## 4. FINDINGS

### 4.1. Analysis of characteristics of academics

The academics were made up of 71.2% men and 28.8% women. Early-career academics (associate lecturers, lecturer

2, and lecturer 1) made up 60% of the sample, while late-career academics (senior lecturers, associate professors/readers, and full professors) made up 40%. Lecturers in Science, Technology, Engineering, and Mathematics (STEM) made up 50.2% of the sample, while those in Humanities and Social Sciences (HSS) related disciplines made up 49.8%.

## 4.2 Descriptive and correlations analyses

Table 1 shows the results of descriptive and correlation analyses. The mean scores ( $\bar{x}$ ) for the academic entrepreneurial resources range between 5.36 (AEO) and 5.56 (AEInn) and the standard deviation (Sd) between 0.90 (AEO) and 0.98 (AEM). The mean score ( $\bar{x}$ ) and Sd for AEE are 3.78 and 1.46, respectively. Correlation analyses show significant moderate positive intercorrelations among the three AERs with correlation coefficients ranging from 0.376 (AEInn vs. AEO) to 0.469 (AEM vs. AEO) and between AERs and AEE range from 0.212 (AEM) to 0.311 (AEInn).

Table 1: Descriptive statistics and correlations among the AERs and AEE variables

SN	Variable	Meas	SD	1	2	3	4	5
1	Demo	1.29	0.46	1.00	.089	.078	-.009	.149**
2	AEInn	5.56	0.95		1.00	.412**	.376**	.311**
3	AEM	5.53	0.98			1.00	.469**	.212**
4	AEO	5.36	0.90				1.00	.234**
5	AEE	3.78	1.46					1.00

\*\* $p < .001$ ,  $N = 298$

Notes: Demo (Demographic Variables), AERs (Academic Entrepreneurial Resources), AEInn (Academic Entrepreneurial Innovativeness), AEM (Academic Entrepreneurial Motivation), AEO (Academic Entrepreneurial Orientation), and AEE (Academic Entrepreneurial Engagement).

## 4.3 Hypotheses testing

Hypotheses 1 and 2 were assessed by examining the mean scores and standard deviations of academics on the three entrepreneurial resources and entrepreneurial engagement. These statistics are appropriate to analyse sample characteristics in aggregated rating and ordinal scales like the Likert scale, especially with large sample sizes ( $\geq 30$  to 40) (Pallant, 2007). A check on the normality of distribution using Kolmogorov-Smirnov and Shapiro-Wilk tests (Table 2) (Harpe, 2015) showed that the data on all the variables are approximately normally distributed and are free of extreme scores that may make the use of mean and standard deviation unjustifiable.

Table 2: Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df.	Sig.	Statistic	df.	Sig.
AEInn	0.108	298	.000	0.954	298	.000
AEM	0.096	298	.000	0.904	298	.000
AEO	0.106	298	.000	0.905	298	.000
AEE	0.071	298	.001	0.969	298	.000

### a. Lilliefors Significance Correction

As shown in Table 1, mean scores on the variables ranged from 5.36 for AEO to 5.56 for AEInn and 3.78 for AEE on a scale of 1 (To no extent/Strongly disagree) to 7 (To a very great extent/Strongly agree). The standard deviations are observed to be low, ranging from 0.89 for AEO to 0.98 for AEM, and 1.46 for AEE. The clustering of data around the means with less variability indicates that the mean scores are a true reflection of the extent of entrepreneurial resourcefulness and engagement of academics, indicating that academics are entrepreneurially resourceful in innovativeness, motivation, and orientation. However, the relatively low mean score ( $\bar{x} = 3.78$ ) and high standard deviation ( $Sd = 1.46$ ) for AEE indicate that most of the AEE scores fall below the mean score. This implies that some academics engage entrepreneurially, but many academics do not. Thus, while hypothesis 1, that academics lack

entrepreneurial resources of innovativeness, motivation, and orientation necessary for entrepreneurial engagement was disproved, hypothesis 2, that academics engage in a low level of entrepreneurial activities was upheld.

Hypothesis 3 was tested by conducting a hierarchical regression analysis. Two regression analyses were conducted. In the first analysis, the overall model was estimated by entering the demographic variables with all entrepreneurial resources en bloc in the regression equation. This resulted in an overall model that explained 21.7% ( $R^2 = .217$ ,  $p < .001$ ) of the variance in Academic Entrepreneurial Engagement (AEE). In the second equation, four models were estimated. Following the suggestion of Meyers, Gamst, and Guarino (2013), the entrepreneurial resources were entered into the regression equation according to the weight of their correlations with AEE in Table 1. As suggested by Garson (2006) and Mertler and Vannatta (2005), demographic variables (Model 1) were entered first into the regression equation to effectively hold constant any influence they may have on AEE. Then, sAEInn (Model 2), AEO (Model 3), and AEM (Model 4) were consecutively added to the equation. Change in  $R^2$  ( $\Delta R^2$ ), a measure of effect size, was estimated at each step to determine whether any one particular entrepreneurial resource contributes to the impact on entrepreneurial engagement over and above the resource already in the regression equation. Standardised beta weights ( $\beta$ ) were estimated to determine the unique contribution of each of the entrepreneurial resources to AEE.

Results in Table 3 show that demographic variables and each of the three AERs produced an overall model that accounted for 23.2% of the variance in AEE. The demographic variables, AEInn, AEO, and AEM, respectively, produced 22.8%, 23.0%, and 23.2% variances in AEE, resulting in a significant change ( $\Delta R^2$ ) of 1.7% by AEInn, but insignificant changes of 0.1%, and 0.2% by AEO and AEM, respectively. Thus, out of the three AERs, only AEInn made a significant contribution to the variance in AEE. Assessment of their unique contributions using their beta weights ( $\beta$ ) also revealed that only AEInn made a significant unique impact of 14.6% ( $\beta = .146$ ,  $p < .01$ ) on AEE. AEO and AEM did not have any significant impact on AEE. Thus, hypothesis 3, that AERs (innovativeness, motivation, and orientation) do not have a significant impact on their entrepreneurial engagement was confirmed, as only one out of the three AERs significantly impacts AEE.

Table 3: Hierarchical regression analyses for the impact of academic entrepreneurial resources (AERs) on academic entrepreneurial engagement (AEE).

Dependent Variable	Independent Variables	F	R <sup>2</sup>	Adj-R <sup>2</sup>	$\Delta R^2$	$\beta$
AEE	Demo and all AERs	16.191**	.217**	.204	.217**	.136*
	Model 1: Demo	7.016*	.023*	.020	.023*	.145*
	Model 2: AEInn	6.423*	.228*	.220	.017*	.146*
	Model 3: AEO	.526	.230	.219	.001	.050
	Model 4: AEM	.749	.232	.218	.002	-.056

\*\* $p < .001$ , \* $p < .01$ , N = 298

## 5. DISCUSSIONS

In contrast to hypothesis 1, evidence from this study indicates that academics are entrepreneurially resourceful in terms of innovativeness, motivation, and orientation. This finding suggests that academics have the resources needed to identify new opportunities as well as evaluate and conduct innovative research that will benefit the market. Several studies have found these resources to be significant predictors of knowledge transfer, research commercialisation, and other academic entrepreneurial activities (Prónay & Buzás, 2015; Rizzo, 2015; D'Este & Perkmann, 2011; Di Gregorio & Shane, 2003; Vidic, 2013; Chaston & Scott, 2012; Ismail et al., 2015). Becoming academic entrepreneurs or champions of new ventures is primarily attributed to their individual attributes (Clarysse et al., 2011). As a result, it is incorrect to assume that African academics lack entrepreneurial skills. Aligning with the resource-based theory, possessing these resources predisposes academics to recognise and exploit the market value of research opportunities and perform a wide range of entrepreneurial activities, and overcome challenges (Mickiewicz, Nyakudya, Theodorakopoulos, & Hart, 2017; Hörisch, Kollat, & Brieger, 2017; Kachlami, Yazdanfar, & Öhman, 2018; Meyskens, Carsrud, & Cardozo, 2010).

Low-level entrepreneurial engagement found among academics was anticipated and consistent with the speculation that African academics are not entrepreneurially engaged (Jones et al., 2007; Munyoki et al., 2011). While this

may be due to the pressure to conduct research solely for publication and career advancement, rather than for knowledge transfer and commercialisation as reasoned by Bogoro (2015) and Atuahene (2011), it may also be due to other individual and institutional constraints like the difficulty of integrating academic duties with industrial engagement (Ambos, Mäkelä, Birkinshaw, & D'Este, 2008), lack of entrepreneurship knowledge, lack of institutional support system, inadequate sensitisation of academics by management on the benefits of knowledge transfer, and lack of institutional incentives (Siegel, et al., 2004). According to Ajzen (2012) and Carsrud and Brännback (2011), perceived barriers prevent individuals from acting on their entrepreneurial intentions.

The possibility that this result may also be attributed to early-career academics was explored. The mean scores and t-tests for independent samples were used to compare the entrepreneurial engagement of early and late-career academic samples. Early-career academics were found to differ significantly from late-career academics ( $t = -1.96$ ,  $df. = 296$ ,  $p < .05$ ), with early-career academics having significantly lower mean scores ( $\bar{x} = 2.54$  and  $\bar{x} = 5.01$ ) due to their relative lack of experience in commercial research. This suggests that the low level of entrepreneurial activities by academics in the study may actually be due to early-career rather than late-career academics. Previous studies have confirmed that academics' entrepreneurial engagement is influenced by their career life cycle (D'Este & Perkmann, 2011; Novotny, 2017). They are more likely to engage in entrepreneurial activities later in their careers when they have attained higher academic positions, amassed ample intellectual capital, and gained more industrial work experience.

In terms of the impact of entrepreneurial resources on academics' entrepreneurial engagement, entrepreneurial innovativeness was found to have a significant impact on academics' entrepreneurial engagement. This contradicts the study's expectations. However, the failure of entrepreneurial motivation and orientation to impact academics' entrepreneurial engagement confirms the expectations. Though the impact of entrepreneurial innovativeness on entrepreneurial engagement is unexpected, it is consistent with literature linking entrepreneurial innovativeness to academic business engagement, research spin-offs, and knowledge and technology transfer among scientists (Moog, Werner, Houweling, & Backes-Gellner, 2015; Kautonen, van Gelderen, & Fink, 2015; Ismail et al., 2015). The ability of academics to identify and conduct novel research while capitalising on market value is determined by their innovativeness as a primary entrepreneurial resource. The failure of entrepreneurial motivation and orientation to influence academic entrepreneurial engagement in this study contradicts the literature, which has established these resources as critical to the academic entrepreneurial process and critical in determining an academic's proclivity to engage in entrepreneurial endeavours (Rizzo, 2015; Ismail et al., 2015). It does, however, confirm the hypothesis that African academics are not entrepreneurial.

## **6. CONCLUSION**

This study is premised on the notion that African academics and scientists lack the capacity to engage with industry successfully. It is an important first step toward empirically evaluating and validating this speculation by assessing African academics' entrepreneurial resourcefulness and engagement with a focus on Nigerian academics. Contrary to popular belief, academics are entrepreneurially resourceful in terms of innovativeness, motivation, and orientation, all of which are required for sensing, conducting, and bringing research to market. But their level of entrepreneurial engagement is low. While entrepreneurial innovativeness influences their entrepreneurial engagement, entrepreneurial motivation and orientation are insufficient to generate it. Thus, while the study discovered evidence to contradict the speculations about academics' entrepreneurial resourcefulness, it also found evidence to support the low level of entrepreneurial engagement among academics.

### **6.1 Implications of the study**

This study has important implications for both the literature and practice. The findings refute the notion that African academics lack entrepreneurial skills while validating speculation about their low entrepreneurial engagement. These contradictory findings explain why, despite the fact that good research with market value abounds in Africa, particularly in Nigerian universities, their commercial rate is low. Beyond the notion, this study was able to provide empirically verifiable evidence and insights into African academics' entrepreneurial resources and engagement. As a result, the study was able to expand the literature by providing information and discoveries that will spark further discussions and research on African academic entrepreneurship.

The study has a wide range of practical applications for academics, departments, and the university as a whole. The discovery of entrepreneurial resourcefulness (innovativeness, motivation, and orientation) among academics demonstrates that academics, first and foremost, have the basic prerequisites for entrepreneurial engagement. This leaves the university with the responsibility of fostering entrepreneurial spirits and interests within the



university, as well as raising academics' awareness of the benefits of commercialising their research in order to generate research grants and additional revenue for themselves, their department, and the university. According to literature, the decision of universities to become entrepreneurial is aided by the internal supportive environment of the universities (Toledano & Urbano, 2008). By providing an enabling university environment and putting in place a support system and associated infrastructural facilities, university administration plays a critical role in facilitating the entrepreneurial engagement of academics and departments.

Universities should establish a technology transfer office (TTO), an industrial liaison office (ILO), business incubation centres, and science parks to coordinate and identify commercially valuable research and activities to commercialise it; identify and license new technology and relevant intellectual property; stimulate and manage the flow of knowledge and technology between the university and the industries and markets and facilitate and grow business incubation centres. Furthermore, the university can assist academics in establishing and cultivating networks by assisting them in creating forums that connect them with industry players.

The university can also collaborate with industries through a direct partnership programme that allows for staff exchange for specific periods of time. Academics may be granted a two-year professional practice leave in the industry during their first eight years of university work, in order to gain industrial experience and business knowledge. Academics will be exposed to industrial needs on which research can be focused. The exchange programme has the potential to bridge the cultural gap between academia and industry, allowing for greater collaborative efforts. All of this raises the prospect of academics conducting more industry-relevant and commercially relevant research. The university can also assist academics to overcome institutional constraints such as insufficient rewards and poor incentives for university researchers (Siegel et al., 2004; Debackere & Veugelers, 2005); time constraints due to work overload (De Silva, 2012); and funding difficulties due to limited resources and insufficient R&D funding (Atuahene, 2011; Mohamedbhai, 2008). The effects of the "publish or perish" academic culture can be mitigated by giving equal weight to inventions, innovations, and patent developments for promotion and career advancement as publications.

## **6.2 Limitations of the Study**

The study is limited to a single university and an academic sample with a skewed distribution across disciplines. While data from some disciplines is sufficient, data from others is insufficient. This calls the findings' generalisability into question. Given the inherent diversity of the academic population and universities, the findings may differ across disciplines and universities with a larger sample size. As a result, the findings of this study should be regarded as preliminary and should not be generalised beyond the focal university in the absence of additional research that addresses these limitations. The findings should also be interpreted with caution as an index of African academic entrepreneurship.

## **6.3 Suggestions for Future Studies**

First, research has shown that academic engagement is a multi-level phenomenon that necessitates taking into account individual academic characteristics, departmental entrepreneurial culture, and the university's entrepreneurial support system (Perkmann et al. 2013). The department and university shape individual faculty members' entrepreneurial attitudes and behaviours. Departmental entrepreneurial culture and the entrepreneurial activities of experienced faculty in spinoff creation, knowledge transfer, and industry collaboration provide the entrepreneurial orientation that encourages early-career academics to pursue research and commercialisation (Chang et al., 2016; Rasmussen, Mosey, & Wright, 2014; Sieger & Monsen, 2015). Similarly, entrepreneurial universities with internal supportive environments, culture, and infrastructure influence departmental entrepreneurial cultures and encourage academics to have positive attitudes toward engaging in entrepreneurial activities (Chang et al., 2016). However, research on the impact of department and university contexts on academic entrepreneurial engagement in Africa is limited. As a result, future research should consider investigating the role of departmental and university contexts in facilitating or impeding African academics' entrepreneurial engagement.

Second, the academics' lack of entrepreneurial intent could be another plausible explanation for their low engagement. Intention has been identified as the most important predictor of action and the most immediate precursor to establishing a business (Douglas, 2013; Kautonen, et al., 2015; Krueger, Reilly, & Carsrud, 2000; Schlaegel & Koenig 2014). As a result, if their motivation is insufficient, academics will not engage in entrepreneurship; therefore, research into the role of entrepreneurial intention in academic entrepreneurial engagement will be critical.

Third, while this study found that entrepreneurial motivation and orientation have no effect on academics' entrepreneurial engagement, the two entrepreneurial resources may be able to moderate the relationship between innovativeness and entrepreneurial engagement. As moderators, it is likely that the combination of innovativeness and the two entrepreneurial resources will result in a higher level of entrepreneurial engagement than innovativeness alone can provide. Similarly, the assumption that entrepreneurial intention has a direct causal effect on engagement assumes that the relationship between entrepreneurial intention and engagement can be moderated by the three entrepreneurial resources. If this assumption is correct, the presence of entrepreneurial resources increases the likelihood that entrepreneurial intention will be realised, implying the pathways by which entrepreneurial intention can be translated into action. As a result, it is worthwhile to investigate the potential of (1) motivation and orientation as moderators of the relationship between innovativeness and engagement, as well as (2) innovativeness, motivation, and orientation as moderators of the relationships between intention and engagement as links facilitating the transition from intention to action.

Finally, research indicates that academic entrepreneurs are motivated by both intrinsic and extrinsic factors (Ozgul & Kunday, 2015). In developed economies, university scientists are primarily motivated by intrinsic factors such as gaining recognition in the scientific community, expanding research work, personal satisfaction, serving the nation, and sharing knowledge, as well as, to a lesser extent, by extrinsic factors such as financial gains, technology transfer, collaboration with industry, spin-offs, and so on as secondary factors (Siegel et al., 2004; Antonioli et al., 2016). Motivations for participating in knowledge transfer activities may differ in the African context. Because academics in Nigeria, for example, are poorly compensated, financial consideration (extrinsic motive) rather than intrinsic motives may be the primary motivator in the decision to engage in entrepreneurial activity. It is critical to investigate the motivations for entrepreneurial engagement in order to develop policies to encourage entrepreneurial engagement among academics in the African context.

## References

- Abidi, O., Nimer, K., Bani-Mustafa, A., & Toglaw, S. (2022). Relationship between faculty characteristics and their entrepreneurial orientation in higher education institutions in Kuwait. *Journal of Innovation and Entrepreneurship*, 11(12): 1-22. <https://doi.org/10.1186/s13731-022-00206-7>
- Abreu, M., & Grinevich, V. (2013). The nature of academic entrepreneurship in the UK: widening the focus on entrepreneurial activities. *Research Policy*, 42, 408-422. <http://dx.doi.org/10.1016/j.respol.2012.10.005>
- Abreu, M., & Grinevich, V. (2014). Academic entrepreneurship in the creative arts. *Environment and Planning C: Government and Policy*, 32, 451-470. <http://dx.doi.org/10.1068/c11144r>
- Acuña-Duran, E., Oyanedel, J.C. & Pradenas-Wilson, D. (2022). Survey data of Entrepreneurial intention and perceived social support from academics-scientists at Chilean Universities. *Data in Brief*, 44, 2352-3409. <https://doi.org/10.1016/j.dib.2022.108537>.
- Ajzen, I. (2012). The theory of planned behaviour. In Lange, P.A.M., Kruglanski, A.W. and Higgins, E.T. (Eds). *Handbook of theories of social psychology*, London, UK: Sage, 1, 438-459. <http://dx.doi.org/10.4135/9781446249215.n22>
- Aldridge, T. T., Audretsch, D., Desai, S., & Nadella, V. (2014). Scientist entrepreneurship across scientific fields. *Journal of Technology Transfer*, 39(6): 819–835. <http://dx.doi.org/10.1007/s10961-014-9339-x>
- Ambos, T., Mäkelä, K., Birkinshaw, J., & D'Este, P. (2008). When Does University Research Get Commercialized? Creating Ambidexterity in Research Institutions. *Journal of Management Studies*, 45(8): 1424-1447. <https://doi.org/10.1111/j.1467-6486.2008.00804.x>.
- Antonioli, D., Nicolli, F., Ramaciotti, L., & Rizzo, U. (2016). The Effect of Intrinsic and Extrinsic Motivations on Academics' Entrepreneurial Intention. *Administrative Science*, 6(15): 2-18. <http://dx.doi.org/10.3390/admsci6040015>
- Atuahene, F. (2011). Re-thinking the missing mission of higher education: an anatomy of the research challenge of African universities. *Journal of Asian and African Studies*, 46(4): 321-341. <http://dx.doi.org/10.1177/0021909611400017>
- Azagra-Caro, J.M., Aznar-Marquez, J., & Blanco, J.M. (2008). Interactive vs. non-interactive knowledge production by faculty members. *Applied Economics*, 40(10): 1289-1297. <http://dx.doi.org/10.1080/00036840600771338>
- Arzenšek, A., Košmrlj K., & Širca, N.T. (2018). Predicting young researchers' university-industry collaboration using theory of planned behaviour. *International Journal of Innovation and Learning*, 24(2): 200-219.
- Aziz, N., Friedman, B.A., Bopievac, A., & Keles, I. (2013). Entrepreneurial motives and perceived problems: an empirical study of entrepreneurs in Kyrgyzstan. *International Journal of Business Research*, 18(2): 163-176.

- Bamiro, O. A. (2004). University-Industry partnership in the innovation process: cases from Nigeria and Ghana. In the Proceedings of the Regional Conference on Innovation Systems and Innovation Clusters in Africa, Dar-es-Salaam/Bagamowu, Tanzania, pp. 341-372, February 18-20, 2004.
- Barney, J.B. (2018). Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. *Strategic Management Journal*, 39(13), 3305-3325. <http://dx.doi.org/10.1002/smj.2949>
- Brieger, S.A., & De Clercq, D. (2018). Entrepreneurs' individual-level resources and social value creation goals: The moderating role of cultural context. *International Journal of Entrepreneurial Behavior & Research*, 25(2): 193-216. <https://doi.org/10.1108/IJEER-12-2017-0503>
- Bogoro, S. E. (2015). Enhancing the relevance of research and industry partnership in Nigeria: a case for new strategies. Paper presented at the Convocation Ceremony of the Federal University of Technology, Owerri, Nigeria, December 3, 1-54.
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial motivations: What do we still need to know? *Journal of Small Business Management*, 49(1): 9-26. <http://dx.doi.org/10.1111/j.1540-627X.2010.00312.x>
- Chang, Y.-C., Yang, P.Y., Martin, B.R., Chi, H.-R., & Tsai-Lin, T.-F. (2016). Entrepreneurial universities and research ambidexterity: a multilevel analysis. *Technovation*, 54, 7–21. <http://dx.doi.org/10.1016/j.technovation.2016.02.006>
- Chaston, I., & Scott, G.J. (2012). Entrepreneurship and open innovation in an emerging economy. *Management Decision*, 50(7): 1161-1177. <http://dx.doi.org/10.1108/00251741211246941>
- Clarysse, B., Wright, M., Lockett, A., de Velde, E.V., & Vohora, A. (2005). Spinning out new ventures: a typology of incubation strategies from European research institutions. *Journal of Business Venturing*, 20, 183-216. <http://dx.doi.org/10.1016/j.jbusvent.2003.12.004>
- Clarysse, B., Tartari, V., & Salter, A. (2011). The impact of entrepreneurial capacity, experience, and organizational support on academic entrepreneurship. *Research Policy*, 40(8): 1084–1093. <http://dx.doi.org/10.1016/j.respol.2011.05.010>
- Covin, J. G., Rigtering, J. C., Hughes, M.; Kraus, S., Cheng, C.F., & Bouncken, R. B. (2020). Individual and team entrepreneurial orientation: Scale development and configurations for success. *Journal of Business Research*, 112, 1-12. doi:10.1016/j.jbusres.2020.02.023
- D'Este, P., & Patel, P. (2007). University-industry linkages in the UK: what are the factors underlying the variety of interactions with industry? *Research Policy*, 36(9): 1295-1313. <http://dx.doi.org/10.1016/j.respol.2007.05.002>
- D'Este, P., & Perkmann, M. (2011). Why do academics engage with industry? The entrepreneurial university and individual motivations. *The Journal of Technology Transfer*, 36, 316–339. <http://dx.doi.org/10.1007/s10961-010-9153-z>
- D'Orazio, P., Monaco, E., & Palumbo, R. (2012). Determinants of academic entrepreneurial intentions in technology transfer process: an empirical test. Available at SSRN 2079114. <http://dx.doi.org/10.2139/ssrn.2079114>
- De Silva, L. (2012). *Academic entrepreneurship in a resource constrained environment*. Unpublished PhD dissertation, Faculty of Humanity, The University of Manchester, United Kingdom. Available at <https://www.escholar.manchester.ac.uk/ukac-man-scw:182475> (Accessed February 2, 2018).
- Debackere, K., & Veugelers R. (2005). The role of academic technology transfer organizations in improving industry science links. *Research Policy*, 34(3): 321-342.
- Di Gregorio, D., & Shane, S. (2003). Why do some universities generate more startups than others? *Research Policy*, 32, 209–227. [http://dx.doi.org/10.1016/S0048-7333\(02\)00097-5](http://dx.doi.org/10.1016/S0048-7333(02)00097-5)
- Diáñez-González, J.P., & Camelo-Ordaz, C. (2016). How management team composition affects academic spin-offs' entrepreneurial orientation: the mediating role of conflict. *The Journal of Technology Transfer*, 41(3): 530-557. <http://dx.doi.org/10.1007/s10961-015-9428-5>
- Dietz, J., & Bozeman, B. (2005). Academic careers, patents, and productivity: industry experience as scientific and technical human capital. *Research Policy*, 34, 349–367. <http://dx.doi.org/10.1016/j.respol.2005.01.008>
- Douglas, E. J. (2013). Reconstructing EI to identify predisposition for growth. *Journal of Business Venturing*, 28(5): 633–651. <http://dx.doi.org/10.1016/j.jbusvent.2012.07.005>
- Edelman, L. F.; Brush, C.G.; Manolova, T.S; & Greene, P.G. (2010). Start-up motivations and growth intentions of minority nascent entrepreneurs. *Journal of Small Business Management*, 48(2): 174–196. <http://dx.doi.org/10.1111/>



- Estrin, S., Mickiewicz, T., & Stephan, U. (2016). Human capital in social and commercial entrepreneurship. *Journal of Business Venturing*, 31(4): 449-467.
- Ertürk, A. (2012). Linking psychological empowerment to innovation capability: investigating the moderating effect of supervisory trust. *International Journal of Business and Social Science*, 3(14): 153-165.
- Etzkowitz, H. (2003). Research groups as 'quasi-firms': the invention of the entrepreneurial university. *Research Policy*, 32(1): 109–121. [http://dx.doi.org/10.1016/S0048-7333\(02\)00009-4](http://dx.doi.org/10.1016/S0048-7333(02)00009-4)
- Fadeyi, O., Maresova, P., Stemberkova, R., Afolayan, M., & Adeoye, F. (2019). Perspectives of University-Industry technology transfer in African emerging economies: evaluating the Nigerian scenario via a data envelopment approach. *Social Sciences*, 8(10): 286. <http://dx.doi.org/10.3390/socsci8100286>
- Fini, R., Grimaldi, R., & Sobrero, M. (2009). Factor fostering academics to start up new ventures: an assessment of Italian founders' incentives. *Journal of Technology Transfer*, 34, 380–402. <http://dx.doi.org/10.1007/s10961-008-9093-z>
- Friedman, B. A., Aziz, N., Keles, I., & Sayfullin, S. (2012). Predictors of Students' Desire to be an Entrepreneur: Kyrgyzstan, Georgia, and the United States. *Eurasian Journal of Business and Economics*, 5(9): 129–140.
- Garson, D. (2006). *Path Analysis*. <http://www2.chass.ncsu.edu/garson/pa765/path.htm>. Accessed June 25, 2012.
- Harpe, S.E. (2015). How to analyze Likert and other rating scale data. *Currents in Pharmacy Teaching and Learning*, 7, 836–850. <http://dx.doi.org/10.1016/j.cptl.2015.08.001>
- Hörisch, J., Kollat, J., & Brieger, S.A. (2017). What influences environmental entrepreneurship? A multilevel analysis of the determinants of entrepreneurs' environmental orientation. *Small Business Economics*, 48(1): 47-69.
- Huyghe, A., & Knockaert, M. (2015). The influence of organizational culture and climate on entrepreneurial intentions among research scientists. *Journal of Technology Transfer*, 40(1): 138–160. <http://dx.doi.org/10.1007/s10961-014-9333-3>
- Ismail, K., Anuar, M.A., Omar, W.Z., Aziz, A.A., Seohod, K., & Akhtar, S. (2015). Entrepreneurial intention, entrepreneurial orientation of faculty and students towards commercialisation. 3rd International Conference on Leadership, Technology and Innovation Management. *Procedia - Social and Behaviora*, 181, 349-355. <http://dx.doi.org/10.1016/j.sbspro.2015.04.897>
- Jayawarna, D., Rouse, J. & Kitching, J., (2011). Entrepreneur motivations and life course. *International Small Business Journal*, 31(1): 34–56.
- Jones, N., Bailey, M., & Lyytikäinen, M. E. (2007). Research capacity strengthening in Africa: trends, gaps and opportunities: a scoping study commissioned by DFID on behalf of IFORD. Overseas Development Institute. <http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2774.pdf>. (Accessed March 16, 2018).
- Iorio, R., Labory, S., & Rentocchini, F. (2017) The importance of pro-social behaviour for the breadth and depth of knowledge transfer activities: An analysis of Italian academic scientists. *Research Policy*, 46(2): 497–509.
- Kachlami, H., Yazdanfar, D., & Öhman, P. (2018). Regional demand and supply factors of social Entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*, 24(3): 714-733. <https://doi.org/10.1108/IJEBR-09-2016-0292>
- Kautonen, T., van Gelderen, M., & Fink, M. (2015). Robustness of the theory of planned behaviour in predicting EI and actions. *Entrepreneurship Theory and Practice*, 39(3): 655–674. <http://dx.doi.org/10.1111/etap.12056>
- Krueger, N.F. (2009). Entrepreneurial intentions are dead: Long live entrepreneurial intentions. Carsrud, A. and M. Brannback (Eds), *Understanding the Entrepreneurial Mind: Opening the Black Box*, Springer, New York, pp. 51–72. [http://dx.doi.org/10.1007/978-1-4419-0443-0\\_4](http://dx.doi.org/10.1007/978-1-4419-0443-0_4)
- Krueger, N.F., Reilly, M.D., & Carsrud, A.L. (2000). Competing models of entrepreneurial intention. *Journal of Business Venture*, 15(5/6): 411–432. [http://dx.doi.org/10.1016/S0883-9026\(98\)00033-0](http://dx.doi.org/10.1016/S0883-9026(98)00033-0)
- Langkamp Bolton, D., & Lane, M. (2012). Individual entrepreneurial orientation: development of a measurement instrument. *Education + Training*, 54(2): 219-233. <http://dx.doi.org/10.1108/00400911211210314>
- Lee, S., Kang, M.-J., & Kim, B.-K. (2022). Factors Influencing Entrepreneurial Intention: Focusing on Individuals' Knowledge Exploration and Exploitation Activities. *Journal of Open Innovation: Technology, Market and Complexity*, 8(3): 1-16. <https://doi.org/10.3390/joitmc8030165>

- Mertler, C.A., & Vannatta, R.A. (2005). *Advanced and Multivariate Statistical Methods: Practical Application and Interpretation*. Glendale, CA: Pyrczak Publishing.
- Meyers, L.S., Gamst, G.C., & Guarino, A.J. (2013). *Applied Multivariate Research: Design and Interpretation* (2<sup>nd</sup> Ed.). SAGE Publications, Inc, Los Angeles, CA.
- Mickiewicz, T., Nyakudya, F.W., Theodorakopoulos, N., & Hart, M. (2017). Resource endowment and opportunity cost effects along the stages of entrepreneurship. *Small Business Economics*, 48(4): 953-976.
- Miranda, F.J., Chamorro-Mera, A., & Rubio, S. (2017). Academic entrepreneurship in Spanish universities: an analysis of the determinants of entrepreneurial intention. *European Research on Management and Business Economics*, 23, 113-122. <http://dx.doi.org/10.1016/j.iemeen.2017.01.001>
- Mirani, M.A., & Yusof, M. (2016). Entrepreneurial engagements of academics in engineering universities of Pakistan. *Procedia Economics and Finance*, 35, 411-417. [http://dx.doi.org/10.1016/S2212-5671\(16\)00051-4](http://dx.doi.org/10.1016/S2212-5671(16)00051-4)
- Moog, P., Werner, A., Houweling, S., & Backes-Gellner, U. (2015). The impact of skills, working time allocation and peer effects on the entrepreneurial intentions of scientists. *Journal of Technology Transfer*, 40(3), 493-511. <http://dx.doi.org/10.1007/s10961-014-9347-x>
- Mosakowski, E. (1998). Entrepreneurial resources, organizational choices, and competitive outcomes. *Organization Science*, 9, 625-643. <http://dx.doi.org/10.1287/orsc.9.6.625>
- Munshaw, S., Lee, S.H., Phan, P.H., & Marr, K.A. (2019). The influence of human capital and perceived university support on patent applications of biomedical investigators. *The Journal of Technology Transfer*, 44, 1216-1235. <http://dx.doi.org/10.1007/s10961-018-9649-5>
- Munyoki, J., Kibera, F., & Ogutu, M. (2011). Extent to which university-industry linkage exists in Kenya: a study of medium and large manufacturing firms in selected industries in Kenya. *Business Administration and Management*, 1, 163-169. <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/13866>
- Nilsson, A. S., Rickne, A., & Bengtsson, L. (2010). Transfer of academic research: uncovering the grey zone. *Journal of Technology Transfer*, 35(6), 617-636. <http://dx.doi.org/10.1007/s10961-009-9124-4>
- Novotny, A. (2017). Academic entrepreneurship in Eastern Europe: motivations and success of university spin-offs in Hungary. In Fini, R. and Grimaldi, R. (Eds.), *Process Approach to Academic Entrepreneurship: Evidence from the Globe*, World Scientific Publishing, 137-164. [http://dx.doi.org/10.1142/9789813220621\\_0006](http://dx.doi.org/10.1142/9789813220621_0006)
- Odetunde, O. J. (2019). Employee Innovation Process: An Integrative Model. *Journal of Innovation Management*, 7(3): 15-40. [https://doi.org/10.24840/2183-0606\\_007.003\\_0003](https://doi.org/10.24840/2183-0606_007.003_0003).
- Oduwaiye, R., Owolabi, H., & Onasanya, S. (2009). Research dissemination, utilization and commercialisation by academic staff of a Nigerian university. Paper presented at the paper presented at the HERPNET-KIU Conference on Research in African Higher Education for Sustainable Development, Kampala.
- OECD (2013). *Commercialising Public Research: New Trends and Strategies*, OECD Publishing. <http://dx.doi.org/10.1787/9789264193321-en> (Accessed September 10, 2019).
- Ojo, O.T., Dorasamy M, W., Migin M.; Jayabalan, J., Rajeswari, R., & Tung, S.S. (2022). Academic entrepreneurial engagement for frugal innovation in higher education institutions: a systematic literature review, *F1000Research*, 10, 1078. [doi.org/10.12688/f1000research.73312.2](https://doi.org/10.12688/f1000research.73312.2)
- Okręglicka, M., Filipowicz, A., & Betáková, J. (2021). Students' entrepreneurial orientation and plans of setting up business: The importance of educational system. *Journal of Management*, 37(1): 53-57. <http://doi.org/10.38104/vadyba.2021.1.05>.
- Orazbayeva, B., Davey, T., Plewa, C., & Galán-Muros, V. (2020). Engagement of academics in education-driven university-business cooperation: a motivation-based perspective. *Studies in Higher Education*, 45(8): 1723-1736. <https://doi.org/10.1080/03075079.2019.1582013>
- Ozgul, U., & Kunday, O. (2015). Conceptual Development of Academic Entrepreneurial Intentions Scale. *Procedia - Social and Behavioral Sciences*, 195, 881 - 887.
- Pallant, J. (2007). *SPSS survival manual, a step-by-step guide to data analysis using SPSS for windows*. (3rd ed.), McGraw Hill: Sydney, 179-200.
- Perkmann, M., Salandra, R., Tartari, V., McKelvey, M., & Hughes, A. (2021). Academic engagement: A review of the literature 2011-2019. *Research Policy*, 50(1): 104114. <https://doi.org/10.1016/j.respol.2020.104114>

- Perkmann, M., Tartari, V., McKelvey, M., Autio, E., Broström, A., D'Este, P., Fini, R.; Geuna, A.; Grimaldi, R.; Hughes, A.; Krabel, S., Kitson, M., Llerena, P., Lissoni, F., Salter, A., & Sobrero, M. (2013). Academic engagement and commercialisation: a review of the literature on university–industry relations. *Research Policy*, 42(2): 423–442. <http://dx.doi.org/10.1016/j.respol.2012.09.007>
- Prónay, S., & Buzás, N. (2015). The evolution of marketing influence in the innovation process: toward a new science to business marketing model in quadruple helix. *Journal of the Knowledge Economy*, 6, 494–504. <http://dx.doi.org/10.1007/s13132-015-0248-5>
- Rashid, W., & Ismail, K. (2014). Does entrepreneurial leadership and orientation matter in academic commercialisation of university research? *Journal of Basic and Applied Scientific Research*, 4(6): 183-196.
- Rasmussen, E., Mosey, S., & Wright, M. (2014). The influence of university departments on the evolution of entrepreneurial competencies in spin-off ventures. *Research Policy*, 43(1): 92-106. <http://dx.doi.org/10.1016/j.respol.2013.06.007>
- Rizzo, U. (2015). Why do scientists create academic spin-off? the influence of the context. *Journal of Technology Transfer*, 40(2): 198–226. <http://dx.doi.org/10.1007/s10961-014-9334-2>
- Sá, C.M. (2014). *Perspective of Industry's Engagement with African Universities*. For the African Association of Universities.
- Salhieh, S.M., & Al-Abdallat, Y. (2022). Technopreneurial Intentions: The Effect of Innate Innovativeness and Academic Self-Efficacy. *Sustainability*, 14, 238. <https://doi.org/10.3390/su14010238>
- Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice*. 38(2): 291-332. <https://doi.org/10.1111/etap.12087>
- Scott, S.G., & Bruce, R.A., (1994). Determinants of innovative behaviour: a path model of individual innovation in the workplace. *Academy of Management Journal*, 37, 580–607. <http://dx.doi.org/10.2307/256701> , <http://dx.doi.org/10.5465/256701>
- Shane, S. (2004). *Academic Entrepreneurship: University Spin-Offs and Wealth Creation*. Edward Elgar, Cheltenham.
- Sherman, D.M. (1999). *Managing innovation: A psychological perspective* (Doctoral Dissertation). UMI: 9942289.
- Siegel, D. S., Waldman, D. A., Atwater, L. E., & Link, A. N. (2004). Toward a model of the effective transfer of scientific knowledge from academicians to practitioners: qualitative evidence from the commercialisation of university technologies. *Journal of Engineering and Technology Management*, 21(1): 115–142. <http://dx.doi.org/10.1016/j.jengtecman.2003.12.006>
- Sieger, P., & Monsen, E. (2015). Founder, academic, or employee? A nuanced study of career choice intentions. *Journal of Small Business Management*, 53(1): 30-57. doi: 10.1111/jsbm.12181
- Sormani, E., Baaken, T., & van der Silje, P. (2022). What sparks academic engagement with society? A comparison of incentives appealing to motives. *Industry and Higher Education*, 36(1) 19-36. doi:10.1177/0950422221994062
- Terán-Pérez, B.M., Valdez-Lafarga, C., Miranda-Félix, A., & Flores-Leal, P. (2021). Academic Entrepreneurial Intention: a study through the Theory of Planned Behavior, *Nova Scientia*, 13(2): 1 – 27. <https://doi.org/10.21640/ns.v13i26.2729>
- Todorovic, Z.W., McNaughton, R.B., & Guild, P. (2011). ENTRE-U: an entrepreneurial orientation scale for universities. *Technovation*, 31, 128–137. <http://dx.doi.org/10.1016/j.technovation.2010.10.009>
- Toledano, N., & Urbano, D. (2008). Promoting entrepreneurial mindsets at universities: a case study in the South of Spain. *European Journal of International Management*, 2(4): 382-399.
- Uddin, R., & Kanti, T. (2013). Motivation, success factors and challenges of entrepreneurs in Khulna city of Bangladesh. *European Journal of Business and Management*, 5(16): 148–157.
- Urban, B., & Chantson, J. (2017). Academic entrepreneurship in South Africa: testing for entrepreneurial intentions. *Journal of Technology Transfer*, 44, 948-980. <http://dx.doi.org/10.1007/s10961-017-9639-z>
- Vidic, F. (2013). Entrepreneurial orientation (EO) and knowledge creation (KC). *International Journal of Economic Sciences and Applied Research*, 6(2): 103-124. <https://ssrn.com/abstract=2348579>
- Wagner, C., Brahmakalum, I., Jackson, B., Yoda, T., & Wong, A. (2001). *Science and technology collaboration: building capacity in developing countries?* The RAND Corporation, Santa Monica.

Walker, M., & Mercado, H. (2015). The resource-worthiness of environmental responsibility: a resource-based perspective. *Corporate Social Responsibility and Environmental Management*, 22(4): 208-221.

Wu, J. (2009). *Entrepreneurial orientation, entrepreneurial intent and new venture creation: Test of a framework in a Chinese context*. Doctoral Dissertation. Virginia Polytechnic Institute and State University, USA.

Zampetakis, L. A., & Moustakis, V. (2006). Linking creativity with entrepreneurial intentions: a structural approach. *The International Entrepreneurship and Management Journal*, 2(3): 413-428. <http://dx.doi.org/10.1007/s11365-006-0006-z>

Zhao, Z., Broström, A., & Cai, J. (2020). Promoting academic engagement: university context and individual characteristics. *Journal of Technology Transfer*, 45(1): 304-337. <https://doi.org/10.1007/s10961-018-9680-6>



## CONSUMERS' INTENTION TO USE OMNICHANNELS: SOUTH AFRICAN RETAIL STORES PERSPECTIVE

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### Abstract:

The fourth industrial revolution has transformed how we do things, including retailing and consumers' shopping habits. Multiple devices equipped with multiple screens enable consumers to compare prices before purchasing goods or services. Despite the fast pace of technological development that has provided an opportunity for a unique and satisfying experience for consumers through any touch point in the retailing industry globally, retailers in developing countries are still lagging in understanding the factors influencing omnichannel consumers' behaviour. The literature on factors influencing omnichannel use in a South African context remains inconsistent and fragmented, as most previous studies are based on consumers in European and Asian markets (Weber-Snyman & Badenhorst-Weiss, 2018). Against this backdrop, it becomes imperative to explore the factors influencing omnichannel consumers' behaviour in South Africa. The study contributes to the emerging and growing field of omnichannel retailing by identifying the factors influencing consumer behavioural intention to use omnichannel in South Africa.

Consumers seek out new technology to experiment with and be the first to try it among their family and friends. A descriptive survey was conducted in Gauteng province using a questionnaire. Respondents were identified through the convenience sampling method. The study findings suggest that a consumer's intention to purchase in an omnichannel store is influenced by performance expectancy, effort expectancy and personal innovativeness. The researcher recommends that the omnichannel retailer managers properly define the values incorporated in an omnichannel store to stimulate personal innovativeness during the online shopping journey, as personal innovativeness is an essential predictor of purchase intention. It would be interesting for another researcher to replicate this study in other provinces across South Africa, specifically rural areas.

**Keywords:** *Omnichannel, multichannel consumer, Consumer behaviour, Usage intentions, South Africa*

### Introduction

The world of retailing has changed dramatically in recent decades. The advent of the internet and related digital channels, such as mobile and social media, have changed retail business models, the execution of the retail mix, and shopper behaviour in the past decade (Verhoef, Kannan & Inman, 2015). The COVID-19 pandemic further accelerated changes in the retail business, as most customers preferred online shopping (World Bank, 2022).

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Consumers use multiple means to connect with their companies of choice and expect a consistent and integrated service experience across channels. They are willing to move seamlessly between channels – traditional store, online, and mobile – depending on their preferences, current situation, the time of day, and the product category. Such channel movement is known as the omnichannel approach (Silva, Martins & Sousa, 2018).

Globally, customers stand at the brim of a fourth industrial revolution evolving at an exponential pace, characterised by technological revolution with the breakthrough in the fields of robotics, artificial intelligence, the internet of things and many more. The fourth industrial revolution transformed how we do things; even retailing and consumers' shopping habits have shifted. Consumers have emerged to multi-devices, multiscreen and compare prices before purchasing goods or services. The emergence of online shopping, smartphones, and a plethora of other rapidly evolving technologies awarded consumers opportunities to interact with the brand during the shopping, spending, and payments array. Consumer behaviour, specifically pre- and post-purchasing behaviour, has been understood by retailers like never before because the consumer journey can be readily captured online, something not always so easy with just bricks and mortar stores (Mkansi et al., 2019).

There is considerable research recorded in research on omnichannel. Despite the fast pace of technological development that has provided an opportunity for a unique and satisfying experience for consumers through any touch point in the retailing industry globally, retailers in developing countries are still lagging in understanding the factors influencing omnichannel consumers' behaviour. The literature on factors influencing omnichannel use in a South African context remains inconsistent and fragmented, as most previous studies are based on consumers in European and Asian markets (Weber- Snyman & Badenhorst-Weiss, 2018). Despite increased research on information and communication technology (ICT) and multichannel systems/devices, this study must continue investigating omnichannel consumer behaviour in the South African context. Against this backdrop, it becomes imperative to explore the factors influencing omnichannel consumers' behaviour in South Africa.

## 2. LITERATURE REVIEW

Omnichannel has become an indispensable part of people's daily lives; more people than before are using the web to shop for a wide variety of items, from houses to shoes to aeroplane tickets. According to a Mastercard study on consumer spending (2020), it was revealed that 68 percent of South African consumers have been shopping more online since the onset of the COVID-19 pandemic. The study showed that essential items had seen the highest surge online, with the majority (81 percent) of South African consumers saying they purchased data and over half saying they bought clothing (56 percent) and groceries (54 percent) online since the pandemic started. 68 percent of people have learnt a new skill, such as online banking, cooking, mastering DIY projects, and dancing, while 52 percent have spent more money on virtual experiences. Smidt & Maigurira (2020) argued that loyalty is not guaranteed as consumers show an affinity for trying new brands; instead, shoppers' main concerns at the forefront of purchase decisions were convenience (40 percent), price (39 percent), stock availability (33 percent) and with speed (41 percent) being the most crucial factor of all.

Omnichannel is defined (Cummins et al., 2016) as the "synergetic integration of customer touchpoints and communication opportunities to create a unified brand experience regardless of channel, platform or stage in the selling process". The gain of omnichannel is that the customers can buy online and pick up in-store (click & collect), for example, use mobile in-store to research, make a purchase, or buy in-store and initiate a return online. Multichannel retailing companies sell through several sales channels, such as brick and mortar stores, social media, e-commerce, contact centres, and mobile, independent of the others. Their empirical studies on omnichannel retailing most explored different functional management areas, such as supply chain orlogistics.

According to Goga et al., (2019), South African e-commerce proliferates from a small base. Weber-Snyman and Badenhorst-Weiss (2016), suggested four significant last-mile logistical challenges facing the South African omnichannel grocery retailer. Brink et al. (2019) argued that South African consumers are still not confident about buying groceries online. Mkansi et al. (2019) suggested how the need to scale the use of new mobile application innovations fuels value-added services. Masebe et al. (2020) found that digital disruption was causing a shift in consumer behaviour, which led to a reduction in demand for retail space and lower rentals and property values. Moreover, technological and product factors influence customer satisfaction, and that service factors have a non-significant effect on customer satisfaction with online shopping.

Several theoretical frameworks have been presented to demonstrate technology use behaviour, such as innovation diffusion theory (IDT), Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003),



UTAUT2 by Venkatesh et al. (2012) and technology acceptance model (TAM) by Davis (1989). This study focuses on the UTAUT2 framework, explaining consumer ICT acceptance and use (Venkatesh et al., 2012). UTAUT2 is seen as an extension of the previous version of UTAUT by adding three new variables, these being hedonic motivation, price value and habit (Venkatesh et al., 2012), in addition to the four main variables, which are performance expectancy, effort expectancy, facilitating conditions and social influence. Juaneda-Ayensa, Mosquera and Murillo (2016) reviewed omnichannel strategy in the apparel sector, but not only in terms of the UTAUT2 model, as they also included two other variables: personal innovativeness and perceived security. This adjustment was made to have a better model of the consumers to examine the factors influencing the acceptance and usage of technology. Purchase intention of omnichannel shopping is driven by exogenous variables such as performance and effort expectancy, social influence, facilitating conditions, hedonic motivation, habit, personal innovativeness, and perceived risk, which are set as main antecedents.

These five attributes, including the dimension of personal innovativeness and perceived security, are briefly discussed next:

**Performance expectancy (PE)** is similar to relative advance in IDT, defined as the degree to which using different channels and/or technologies during the shopping journey will provide consumers with benefits when buying essential goods (Venkatesh et al., 2012).

**Effort expectancy (EE)**, which includes factors such as perceived ease of use in TAM, is defined as the degree to which a consumer believes that using an omnichannel technology would be free of effort with consumers' use of different touchpoints during the shopping process (Venkatesh et al., 2012).

**Social influence (SI)** is defined as the extent to which consumers perceive that people who are close to them, such as families, friends, colleagues, role models, etc., believe they should use different channels depending on their needs (Venkatesh et al., 2012).

**Facilitation condition (FC)** relates to customers' perceptions of the availability of resources and support tools to produce behaviour (Venkatesh et al., 2003).

**Hedonic motivations (HM)** are associated with adjectives such as fun, pleasurable, and enjoyable (Venkatesh et al., 2012).

**Personal innovativeness (PI)** is the degree to which a person prefers to try new and different products or channels and seek out new experiences requiring a more extensive search (Midgley & Dowling, 1978).

**Perceived security (PS)** is defined as the perception by users that omnichannel companies' technology strategies include the antecedents of information security, such as authentication, protection, verification, or encryption (Kim et al., 2008).

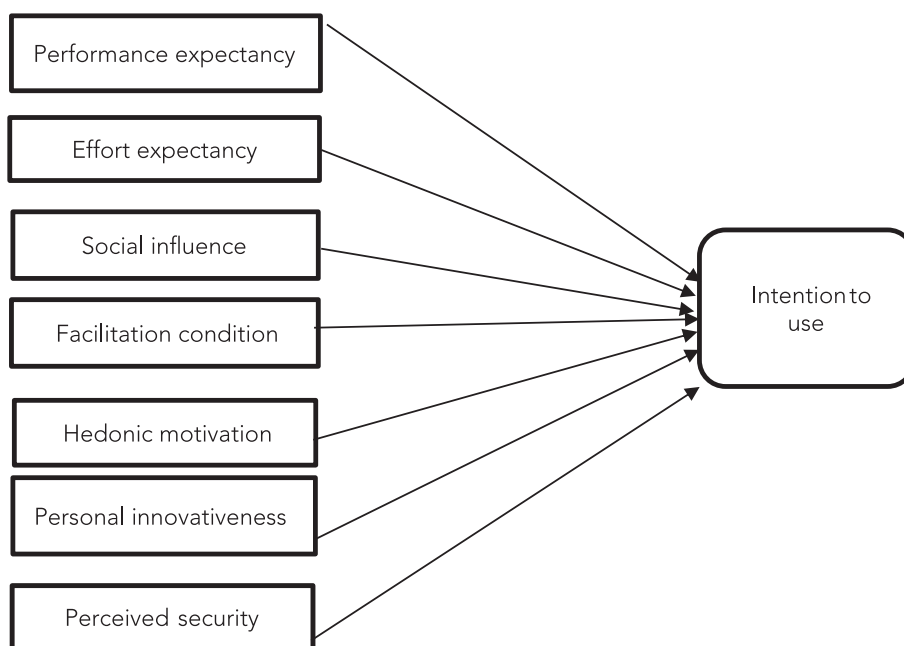


Figure 1.1: Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003)

This study aims to understand the factors that influence the consumers to use omnichannel from South African perspectives. While the question that this paper seeks to answer is: What are consumers' behavioural intentions to use omnichannel in South Africa?

In keeping with the literature, the study proposed the following hypotheses:

*H1. Performance expectancy positively affects omnichannel purchase intention.*

*H2. Effort expectancy positively affects omnichannel purchase intention.*

*H3. Social influence positively affects omnichannel purchase intention.*

*H4: Facilitating conditions positively influence omnichannel purchase intention.*

*H5: Hedonic motivation positively influences omnichannel purchase intention.*

*H6: Personal innovativeness positively influences omnichannel purchase intention.*

*H7: Perceived risk negatively influences omnichannel purchase intention.*

### **3. METHODOLOGY**

The methodology is the master plan that specifies the methods and procedures for collecting and analysing the needed information. This study adopted the quantitative method as it examines the relationship between dependent and independent variables and uses numerous statistical techniques. The descriptive survey design was utilised, which influenced the choice of the design of research questions, purpose and the data collection used in this study.

#### **3.1. Sample and population**

The study-targeted onmishoppers (online shoppers) in Gauteng province, and an online survey was sent to customers with smartphones and shopping apps using the convenience sampling technique. Tabachnick and Fidell (2013) commented that the regression method sample size should be equal to  $n < 50 + 8m$ , where  $m$  is the number of independent variables. With this research model, there are seven independent variables; the minimum sample size for this should be 106 ( $50 + 8 \times 7$ ). Considering the above requirements, this research meets the minimum sample size requirement with 126 respondents.

#### **3.2. Questionnaires**

The questionnaire in this study consisted of two parts. The first part of the questionnaire was used to gather sociodemographic information, such as gender, age, employment status and education. The second part contained statements about consumer intention behaviour. Based on their most recent shopping process, respondents were instructed to rate their agreement with each item on a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). According to recent surveys, the sample was highly representative of online shoppers' distribution (UNCTAD, 2020).

#### **3.3. Design analysis**

Statistical Packages for Social Sciences (SPSS) V28 was used to analyse the measurement instrument and test the study hypotheses. Following the methodological precedence of Shambare (2012); Field (2013) and Brink et al. (2019), statistical analyses (SPSS v.28) were used to perform the following analyses:

- (1) Descriptive statistic – this was used to outline the basic features of the data in the study and forms the basis of the quantitative data analysis.
- (2) Chi-square tests – this statistical test was used to compare observed data with data we would expect to obtain according to a specific hypothesis.
- (3) Reliability analysis – Cronbach's alpha was used to assess the measure of internal consistency (reliability) of measurement scales.
- (4) Regression analysis – this statistical test was used to test the proposed model and hypotheses.

### **4. RESULTS**

Following the closure of the survey, 126 replies were received: 69 males and 57 females. In terms of age, 13.2

percent were 18-25 years old, 40.4 percent were 25-35 years old, 39.7 percent were 36-45 years old, 5.9 percent were 46-55 years old and 50+ old age groups, an approximate 0.7 percent. Further results showed that 93.5 percent were from the younger than 45 years old and 6.5 percent from the 46 and above age groups. Regarding marital status, the single respondents accounted for more at 53.7 percent, while married respondents were 40.7 percent. In terms of education, there were three main categories: higher percent grade 12 was 34.8 percent, postgraduate was 32.6 percent and undergraduate at 30.4 percent.

Table 1.1: Demographic profile

VARIABLES		COUNT	PERCENTAGE (%)
Age	18-25	18	13.24
	25-35	55	40.44
	36-45	54	39.71
	46-45	8	5.88
	55+	1	0.74
Gender	Male	69	54.41
	Female	57	45.49
Marital Status	Married	73	53.68
	Single	55	4.44
	Separated/Divorced	8	5.88
Education	Primary school	2	1.47
	Grade 12	49	36.03
	Undergraduate	41	30.15
	Postgraduate	44	32.35
Income	less than R5, 000	33	24.26
	R5, 001 – R10, 000	25	18.38
	R10, 001 – R20, 000	35	25.74
	R20, 001 – R30, 000	18	13.24
	Above - R30, 001	25	18.38

To ascertain the reliability of the measurement scales and to check the degree to which the items that make up the scale, Cronbach's alpha coefficient was calculated. Cronbach's alpha checks the internal consistency reliability of scales. It checks whether the items that make up the scale measure the same underlying construct (Pallant, 2010). Cronbach's alpha closer to 1.0 is preferred. A Cronbach's alpha value of 0.9 and above was regarded as the most reliable of scales, while a scale with a Cronbach's alpha value below 0.5 is regarded as unreliable and cannot be used to measure a given construct.

Table 1.2: Cronbach alpha

Sub-Scale	Cronbach's alpha
Performance expectancy	0.86
Effort expectancy	0.88
Social influence	0.80
Facilitation condition	0.91
Hedonic motivation	0.88
Personal innovativeness	0.83
Perceived security	0.69

Regression analysis is "the technique used to derive an equation that relates the criterion variables to one or more predictor variables; it considers the frequency distribution of the criterion variable, when one or more predictor variables are held fixed at various levels" (Saunders et al., 2019). A simple linear regression analysis was presumed to determine the factors that caused significant variations in consumers' behavioural intention on omnichannel. The usage intention was the dependent variable, while performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, personal innovativeness, and perceived risk were the independent variables.

The results in Table 1.3, depicts that a personal innovativeness ( $\beta = 0.563$ , t-value = 8.077, P-value < 0.001), performance expectancy ( $\beta = 0.908$ , t-value = 5.953, P-value <0.001), effort expectancy  $\beta = 1.093$ , t-value = 5.244, P-value <0.001) and social influence ( $\beta = 1.472$ , t-value = 4.997, P-value < 0,001), exert a positive effect on usage intention of the respondents. Thus, facilitation condition ( $\beta = -0.442$ , t-value = 0.723, P-value = 0,395), hedonic motivation ( $\beta = -0.344$ , t-value = 0.789, P-value = 0.374), and perceived security ( $\beta = -0.103$ , t-value = 0.602, P-value = 0.864) exert a negative effect on the behavioural usage intention of the respondents to purchase goods online.

Table 1.3: Regression analysis

Independent Variables	$\beta$	S.E	t-value	P-value	Hypothesis
Performance expectancy	0.908	0.372	5.953	***	H1- accepted
Effort expectancy	1.093	0.477	5.244	***	H2- accepted
Social influence	1.472	0.659	4.997	***	H3- accepted
Facilitation condition	-0.442	0.518	0.723	0.395	H4- rejected
Hedonic motivation	-0.344	0.387	0.789	0.374	H5- rejected
Personal innovativeness	0.563	0.198	8.077	***	H6- accepted
Perceived security	-0.103	0.602	0.29	0.864	H7- rejected

Note:  $\beta$ : Beta, S.E: Standard error, \*\*\*:  $p < 0.001$ .

## 5. DISCUSSION

Personal innovativeness displayed to be the strongest predictor of purchase intention in the omnichannel context. This factor plays a vital role as a direct driver of omnichannel purchase intention. In consistent with previous papers (San Martín & Herrero, 2012; Escobar-Rodríguez & Carvajal-Trujillo, 2014), individuals who are more innovative about ICT will have a stronger intention to purchase using different channels and devices in an omnichannel environment. Performance expectancy is the second strongest predictor and has a direct positive influence on purchase intention (Karahanna & Straub, 1999; Venkatesh et al., 2012). In keeping with previous researchers (Venkatesh et al., 2012; Escobar-Rodríguez & Carvajal-Trujillo, 2014), effort expectancy was found to be the third most robust predictor of usage intention in an omnichannel environment. The results confirm that omnishoppers are more used to using multiple channels and are more task-oriented, using different channels or technologies to look for better prices or maximise convenience at any given time.

Contrary to previous studies (Venkatesh et al., 2012; Escobar-Rodríguez & Carvajal-Trujillo, 2014), this study's results indicate that facilitation condition, hedonic motivation and perceived security do not influence omnichannel purchase intention. This could be because customers are not used to using different channels due to the relatively low number of companies that allow customers to use multiple channels simultaneously for fun, pleasure, and enjoyment. The authors, such as Valentini et al. (2011) and Melero et al. (2016), believe this variable will increase its importance in the coming years as more and more retailers implement proper omnichannel strategies.

The hypothesised influence of perceived security on omnichannel was found to be insignificant. Previous work done by other researchers in other contexts has found a positive relationship between these variables (Thong et al., 2011; Venkatesh et al., 2012; Escobar-Rodríguez & Carvajal-Trujillo, 2014). These findings are probably because the possibility of engaging in an omnichannel context offsets the need for security, an essential factor in e-commerce, by offering the option of traditional physical presence in-store payment and cash on delivery, which mitigates the perceived risk in e-commerce. In this sense, omnichannel stores offer an opportunity to attract more conservative consumers who perceive an increased risk in e-commerce to a more interactive scenario in which retailers can use new technologies to manage customer relationships based on direct contact in the physical store.

## 6. RECOMMENDATIONS AND CONCLUSION

The findings have practical implications for omnichannel retailer managers regarding the most effective management and marketing tactics for enhancing a crucial aspect of their business: the development of a unified shopping experience for their customers. Explicitly, retailers must identify which technologies they will invest in and define the value adds incorporated in omnichannel stores to stimulate personal innovativeness, performance expectancy and effort expectancy during purchasing journey. Further, the findings show that omnishoppers seek new technology to experiment with and be the first to try it among their family and friends. Managers should thus consider this technological profile and constantly roll out new technologies in different ways to attract and surprise these kinds of shoppers.

The findings verified personal innovativeness as the most potent predictor of purchase intention, accompanied by performance expectancy, effort expectancy and social influence. Meanwhile, this study observed that facilitation conditions, hedonic motivation, and perceived security were insignificant. The results indicated a positive correlation between personal innovation and usage intention ( $\beta = 0.563$ ,  $t$ -value = 8.077,  $P$ -value < 0.001). This finding is in line with (Carvajal-Trujillo, 2014; Frassetto et al., 2015 & Juaneda-Ayensa et al., 2016) who posits that personal innovativeness is a factor that influences consumers' omnichannel usage intention.

## 7. LIMITATIONS AND FUTURE RESEARCH LINES

Data collected from this study to determine factors that influence consumers' intention to use omnichannel in South African perspectives were limited only to the Gauteng province population. Future studies are encouraged to cover other provinces in South Africa, specifically rural areas, to compare investigation results with the results from this study.

## References

- Brink, B.S., Heyns, G. I., & Kilbourn, P. J. (2019). Service quality expectations of online grocery consumers in Gauteng, South Africa. *Journal of Contemporary Management*, 16 (2). doi.10.35683/jcm19059.49
- Cummins, S., Peltier, J. W., & Dixon, A. (2016). Omni-channel research framework in the context of personal selling and sales management: A review and research extensions. *Journal of Research in Interactive Marketing*, 10(1), 2-16. doi.org/10.1108/JRIM-12-2015-0094
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance. *MIS Q.* 13, 319–339. doi: 10.2307/249008
- Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2014). Online purchasing tickets for low-cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model. *Tourism Management*, 43, 70–88. doi.org/10.1016/j.tourman.2014.01.017
- Field A. 2013. *Discovering statistics using SPSS*, 4<sup>th</sup> edition. London: Sage.
- Goga, S., Paelo, A., & Nyamwena, J. (2019). Online retailing in South Africa: An overview. *CCRED Working Paper*, 2. doi.org/10.2139/ssrn.3386008
- Juaneda-Ayensa, E., Mosquera, A., & Murillo, Y. (2016). Omnichannel customer behavior: Key drivers of technology acceptance and use and their effects on purchase intention. *Frontiers in Psychology*, 7. doi.org/10.3389/fpsyg.2016.01117
- Karahanna, E., & Straub, D. W. (1999). The psychological origins of perceived usefulness and ease-of-use. *Information & Management*, 35, 237-250. doi. /10.1016/S0378-7206(98)00096-2
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, 44, 544-564. http://dx.doi.org/10.1016/j.dss.2007.07.001
- Lazaris, C., Vrechopoulos, A., Katerina, F., & Doukidis, G. (2014). Exploring the "Omnichannel" shopper behaviour. In *AMA SERVSIG, International Service Research Conference*, 13-15 June. Thessaloniki, Greece. doi:10.13140/2.1.1278.2089
- Masebe N., Moseneke M., Burger, M., & van Heerden, A. (2020). Digital disruption in retail: management strategies for South African shopping centers. In: Kantola J., Nazir S., Salminen V. (eds) *Advances in Human Factors, Business Management and Leadership*. AHFE 2020. *Advances in Intelligent Systems and Computing*, 1209. Springer, Cham. https://doi.org/10.1007/978-3-030-50791-6\_30

- Melero, I., Sese, F. J., & Verhoef, P. C. (2016). Recasting the customer experience in today's omnichannel environment. *Universia Business Review*, 50, 18-37.
- Mkansi, M., Leeuw, S., & Olatoye Amosun, O. (2019). Mobile application supported urban-township e-grocery distribution. *International Journal of Physical Distribution & Logistics Management*. doi:10.1108/ijpdlm-10-2018-0358
- Neslin, S. A., Jerath, K., Bodapati, A., Bradlow, E. T., Deighton, J., Gensler, S., Lee, L., Montaguti, E., Telang, R., Venkatesan, R., Verhoef, P., & John Zhang, Z. (2014). The interrelationships between brand and channel choice. *Marketing Letter*, 25, 319–330.
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using the SPSS program*, 4<sup>th</sup> Edition. New York: McGraw Hill.
- San Martín, H., & Herrero, Á. (2012). Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. *Tourism Management*, 33(2), 341-350.
- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). *Research methods for business students*, 8th edition. New York: Pearson.
- Silva, S. C. E., Martins, C. C., & Sousa, J. M. D. (2018). Omnichannel approach: Factors affecting consumer acceptance. *Journal of Marketing Channels*, 25(1-2), 73-84.
- Shambare, R. (2012). Predicting consumer preference for Remote Banking Services in South Africa and Zimbabwe: The role of consumer perceptions versus, personality variables. *D.Tech Thesis: Tshwane University of Technology*. SA.
- Smidt, F., & Maigurira L. (2020). *COVID effect: 7 new consumer shopping behaviour trends in South Africa* [Online]. Available at: <https://www.thinkwithgoogle.com/intl/en-ssa/consumer-insights/consumer-trends/covid-effect-7-new-consumer-shopping-behaviour-trends-south-africa/> [Accessed: 07 June 2022].
- Thong, J., Hong, S., & Tam, K. (2011). The effects of post-adoption beliefs on the expectation-confirmation model for information technology continuance. *International Journal of Human Computer Studies*, 64(9), 799-810. doi: 10.1016/j.ijhcs.2006.05.001
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. New York: Harper Collins.
- Valentini, S., Montaguti, E., & Neslin, S. (2011). Decision process evolution in customer channel choice. *Journal of Marketing*, 75 (6), 72-86.
- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27, 425–478.
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157-178.
- Verhoef, P. C., Kannan, P. K., & Inman, J.J. (2015). From multi-channel retailing to omni-channel retailing. *Journal of Retailing*, 91(2). doi:10.1016/j.jretai.2015.02.005
- Weber-Snyman, A.N. & Badenhorst-Weiss, J.A., 2018, 'The last-mile logistical challenges of an omnichannel grocery retailer: A South African perspective', *Journal of Transport and Supply Chain Management* 12(0), a398. doi: org/10.4102/jtscm.v12i0.398
- Weber-Snyman, A.N., & Badenhorst-Weiss, J.A. (2016). Challenges in last-mile logistics of e-grocery retailers: A developing country perspective. *25th International Purchasing and Supply, Education and Research Association*.
- World Bank. (2022). *COVID-19 Drives Global Surge in use of Digital Payments*. [Online]. Available at: <https://www.worldbank.org/en/news/press-release/2022/06/29/covid-19-drives-global-surge-in-use-of-digital-payments>. [Accessed 28 August 2022].







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