

A Bibliometric Analysis of the Township Economy

Lawrance Seseni

Department of Business Management
School of Management
College of Business and Economics
University of Johannesburg
Auckland Park, Johannesburg, South Africa

Abstract

The majority of the South Africans stay in the townships. Historically, townships have been segregated and reserved for blacks, Indians, and mixed-race. These areas were deliberately located far from economic activities such as shopping centres and other businesses. This gave birth to minibuses to transport township dwellers to work as they stayed far from work and mini shopping stores known as tuck shops. These townships have many other challenges that they face such as crime and poor economic activities with most of the businesses operating informally. This study aimed at outlining and understanding who are leading contributors to the township economy, the challenges faced by the township, and the opportunities they provide. In addressing this objective, this study followed a bibliometric analysis. The data that was collected was further analysed using the VOSviewer computer program. The research objectives were achieved in this study. About 688 publications for 64 years from the Scopus database were used in this study. The first publication was first recorded in 1959 to the last paper was recorded in 2023. It was found that China is the leading country in terms of publications and this is followed by South Africa. South Africa has more institutions that they are affiliated with for their research publications. Future research should focus on the importance of social entrepreneurship in addressing challenges faced by township dwellers.

Keywords

Township Economy, Township Entrepreneurship, Entrepreneurship, South Africa

1. Introduction

The township economy comprises businesses and markets that are based in the township. Therefore, in a broad sense, the township economy is referred to as the microeconomy that takes place in the township setting. It should be noted that the majority of these businesses and markets are informal and are basic survivalists. Unfortunately, 70% of them do not last for three years. The term township refers to urban areas (Omonona et al. 2021). Manyaka-Boshielo (2017) argues that townships are underdeveloped urban areas. In the South African context, townships were meant to racially segregate racial groups and use them as a labour pool for the colonial and apartheid economy (Strauss, 2019; Omonona et al. 2021). During the apartheid times, these places were strictly reserved for non-white South Africans. This means they were strictly for mixed race and Africans (Manyaka-Boshielo 2017). Mathibe et al. (2021) state townships were isolated from the economic activities. They were made to be far from commercialisation and economic activities. The township houses were made in a dormitory style. This setup changed the post-apartheid government when they introduced policies that addressed housing. About 50% of the South African inhabitants live in the townships. Sadly, South African townships are challenged by social issues such as a high unemployment rate, crime, and poverty (Kubone 2019; Omonona et al. 2021). Mbambo & Agbola (2020) posit that in the 1920s, many South Africans moved to the urban areas seeking economic emancipation.

The township economy plays a very important role in addressing the high poverty rate, and unemployment rate and stimulating entrepreneurship in townships (Mathibe et al. 2021). The township economy consists of both the informal and the formal economy. Most importantly, the township economy plays an important role in providing skills, and work experience and creating and; maintaining social networks for the people who work and reside in the townships. Additionally, the township economy provides an opportunity for the youth to be lifestyle entrepreneurs and start and manage family businesses (Charman 2016). van Gaalen (2021) posits that the township economy creates employment for 17% of the total labour force and they contribute 6% to the Gross Domestic Product (GDP) of the country. Omonona et al. (2021) argue that townships have a great influence on the political, social, and economic spaces of

South Africa at the current moment. It is worth noting that townships are very small in size but they accommodate the majority of the urban population.

1.1 Objectives

As it is mentioned in the introduction the township economy contributes 6% to the GDP of the country, creates 17% of the total labour force, and it helps in providing skills and opportunities for entrepreneurship. They play a pivotal role in addressing township challenges in South Africa. This study aims to investigate the contribution made by the South African academic fraternity to the township economy, this is achieved by outlining the bibliometric analysis of the township economy. Although there is literature on the township economy, however, according to the author's knowledge there is no publication that focuses on bibliometric analysis of the South African township economy. This study seeks to address that and outline the research trends of the township economy of the South African context.

2. Literature Review

This section reviews the literature on the township economy, its challenges, opportunities, and entrepreneurial activities in South Africa. Considering the literature on township economy, Charman (2017) argues that there is sufficient literature on the topic and South Africa contributed a lot to it. Moreover, the township economy has become a buzzword that is mostly used by politicians. (Jürgens & Donaldson 2012) posits that the number of townships in South African townships research did not exist prior 1970s except for research that was conducted by (Kuper et al. 1958; Lewis 1966; Smith 1974; Hlophe 1977 and Western 1978), which also focused on them from a context of social development. In the 1980s there was a rise in research in the township economy. Politicians recently spoke about the township economy because of the challenges faced by the people in the townships and the opportunities its economy proposes. However, a lot of businesses in the townships fall under the category of micro-enterprises (Charman 2017).

2.1 Challenges in the Townships

In the South African context, townships have a myriad of challenges that they face daily. This is largely caused by the decisions made by the apartheid government. The challenges range from a high unemployment rate, high levels of crime, teenage pregnancy, alcohol and drug abuse, poor infrastructure, and high reliance on government support. Teenage and substance abuse are a result of a lack of amenities for young people which ultimately leads young people to channel their energy into wrong things. There is a great number of township dwellers who travel out of the township as they were deliberately put far from the economic activities so they travel out of the townships for work. Although the democratic government has attempted to address this by introducing amenities in townships, however, township dwellers view them as things of the government hence they do not fully utilise them nor value them (Manyaka-Boshielo 2017). In cities such as Johannesburg, inequality in residential areas is visible. Some areas have been properly planned with beautiful monumental architecture, have beautiful infrastructure, and are closer to the economic hub. The dwellers in such residential areas are the elite. On the other hand, the other townships are mostly overpopulated with poor infrastructure and the dwellers are poor financially (Masuku 2023). Township dwellers were residing far from shopping centres, which led to the birth of what is called "small-scale shops" what is called "tuck shops" or "spaza shops". Since they were segregated and stayed far from the economic activities, they worked far from home and had no private cars they could use to go to work. This led to the emergence of private minibusses that transported people from townships to the area of work. Most of the people who were using these were black people (Mbambo & Agbola, 2020).

2.2 Opportunities in the Townships

As the democratic government is trying to reverse the injustices of the past, the township economy is also getting attention and support from the government through its departments. This is so because the township economy contributes 17% to the GDP and they can help address social issues such as unemployment, crime, substance abuse, and many others. The government through the Small Enterprise Finance Agency provides funding support to micro and small enterprises based in the townships. The programme is called the "Township and Rural Empowerment Programme". The programme is meant to assist in providing training and funding to potential entrepreneurs, start-ups, and established entrepreneurs (SME South Africa 2021A). The types of businesses that exist in townships are food markets, towing services, mini-complexes, laundry services, bakeries, entertainment, creative arts, tourism, tourism shopping, delivery and courier services, photography, renting business assets, digital consulting and online tutoring, internet café, bulk buying and reselling, car wash and recycling (SME South Africa 2021B).

2.3 The Importance of Entrepreneurship

Entrepreneurship is hailed worldwide for solving unemployment. This is very critical in developing and emerging markets such as South Africa because there is a high unemployment rate, especially for the youth (Kubone, 2019). The high unemployment rate in the country is threatening the economy and is regarded as a ticking time bomb in the country. South Africa is one of the countries with the highest unemployment in the world (Naidoo 2021).

As townships are mostly characterised by the informal economy. This means that most businesses are micro and small, and most importantly, they are trading informally without complying with the regulations about running businesses in South Africa (Manyaka-Boshielo 2019). It was proposed in a study by (Manyaka-Boshielo 2019) that township entrepreneurs need entrepreneurship education so that they may increase their efficiency and effectiveness. Entrepreneurial education will formalise and professionalise their businesses and subsequently create employment for the vast majority. Additionally, entrepreneurship education can be very instrumental in stimulating entrepreneurial activities and the intention of potential entrepreneurs. They may be able to successfully start the entrepreneurial venture and manage it. Entrepreneurship education focuses on training people to be able to identify and act on lucrative opportunities. This will help eradicate the big problem of unemployment in the townships and increase the circulation of money within the area.

3. Methods

This study followed the quantitative methodological choice where a bibliometric analysis was used in this study. In conducting bibliometric analysis, Scopus databases were used to collect and analyse publications. Another means of analysis that was used is VOSviewer. Data that was analysed on the Scopus Database website are as follows:

1. Countries that contributed publications
2. Leading affiliations
3. Documents by subjects

Data that was analysed using VOSviewer is as follows:

1. Overlay Visualisation of Keywords
2. Overlay Visualisation of Countries

Bibliometric analysis and the tools that were used for data collection and analysis were in line with the research objectives as it aimed to identify the leading countries, and leading authors with regards to citation, leading affiliations, and leading documents per subject in Township Economy.

4. Data Collection

About 688 publications for 64 years from the Scopus database were used in this study. The first publication was first recorded in 1959 to the last paper was recorded in 2023.

Concerning authors, only the top ten were selected with a minimum of one published document selected and 688 appeared. The choice to select from a minimum of one was because citations would be considered also and generally, there is no relationship between the number of documents published and the number of citations.

Concerning countries, only the top ten countries were selected.

The procedure that was used for collecting and analysing data is as follows:

Step 1: Document search on Scopus Database: The keywords that were used are “Township” AND “Economy”. 688 publications were accessed.

Step 2: Analyse on Scopus Database: Countries that contributed publications, Leading affiliations, and documents by subjects.

Step 3: Save as CVS on the local computer: This was done so that it could be compatible with the VOSviewer application.

Step 4: Uploaded on VOSviewer

Step 5: Analysed on VOSviewer and saved screenshots from the application: Overlay Visualisation of Keywords and Overlay Visualisation of Countries.

The next section will discuss the results of the study and be followed by recommendations as influenced by the findings.

5. Results and Discussion

This section discusses the findings of the study from the bibliometric analysis that was conducted using Scopus databases and VOSviewer.

5.1 Numerical Results

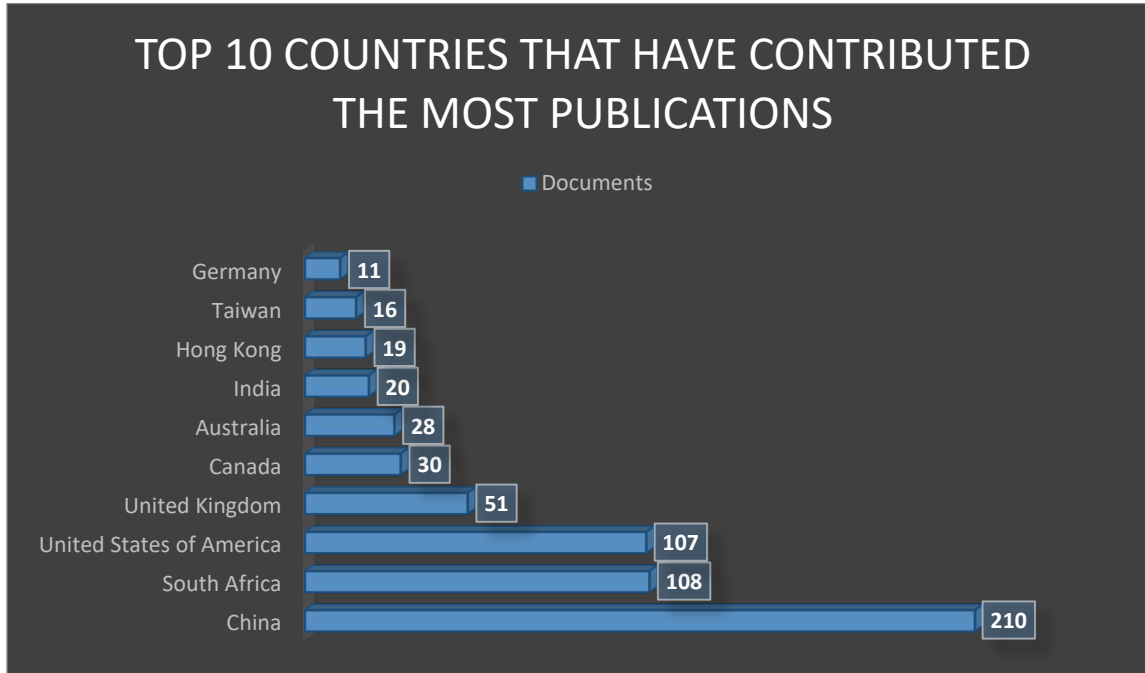


Figure 1: Countries Contribution

Source: Scopus

Figure 1 above illustrates the number of publications each country has. However, in this Table 1, only the top ten countries with the most publications were selected. Several other countries have contributed. The Figure started with the least contributor on the list to the highest contributor. According to this Figure, Germany contributed less with 11 publications. This was followed by Taiwan with 16 publications and Hong Kong with 19 publications. The country with the most publications in township economy is China which is leading with 210. This is 102 more than the second-highest country with publications which is South Africa with 108. South Africa's publications are almost double the publications of China alone. The third highest contributor is the United States of America with 107 publications which is 1 publication behind South Africa.

Table 1: Top Ten Cited Authors

No	Author	Documents	Citations	Publisher	Type of Publication
1.	Byrd W.A.; Lin Qingsong.	2	310	China's Rural Industry	Article
2.	Fujita M.; Hu D.	1	285	Annals of Regional Science	Review
3.	Warner M.; Hebdon R.	1	217	International Journal of Human Resource Management	Article
4.	Rogerson C.M.	3	198	Local Environment	Article

5.	Naughton B.	1	172	American Economic Review	Article
6.	Potts D.	1	161	Journal of Southern African Studies	Article
7.	Manion M.	1	156	American Political Science Review	Article
8.	Li H.; Rozelle S.	2	148	Shengtai Xuebao	Article
9.	Probyn M.	1	138	International Journal of Bilingual Education and Bilingualism	Article
10.	Turok I.	1	133	Urban Forum	Article

Source: Author's Compilation

Table 1 above highlights the top ten leading authors in the field of township economy. In the Table, the author's surname, initials, number of publications, number of citations, publisher, and the type of publication that has been published. Some of the authors have co-authored document(s). The leading authors are Byrd W.A.; Lin Qingsong who co-authored and published two articles on China's rural industry. The number of citations is 310. The second highest cited authors are Fujita M.; Hu D. has co-authored a review that was published in the Annals of Regional Science and has received 285 citations. The third highest cited authors have co-authored one article in an International Journal of Human Resource Management. The article has been cited 217 times. The author who contributed more publications is Rogerson C.M. who published three articles published at Local Environment and these three articles combined have received 172 citations. The three publications were published solely without co-authorship or collaboration. The author with the least citations from Table 1 above is Turok I, who published one article at Urban Forum and received 133 citations.

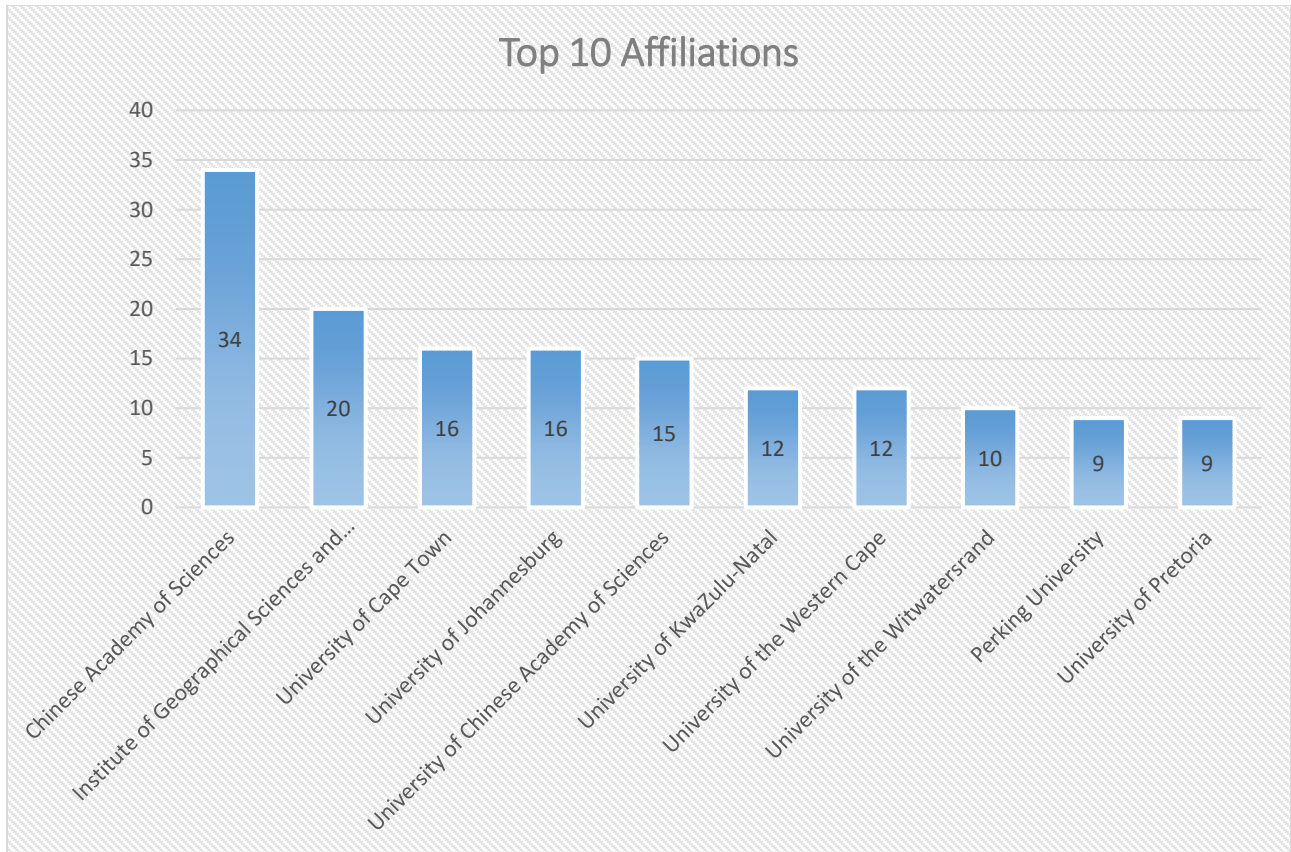


Figure 2: Authors Affiliations

Source: Author's Compilation

Figure 2 above depicts on clustered column that outlines the distribution of the top ten affiliations for authors. The Chinese Academy of Sciences is the leading affiliate with 34 publications. The second highest is the Institute of Geographical Sciences and Resources Research Chinese Academy of Sciences with 20 publications affiliated with it. The third highest affiliation is the University of Cape Town and the University of Johannesburg which is 16 for each affiliation. These two affiliations are found in South Africa. This is followed by the University of Chinese Academy of Sciences with 15 publications. This is followed by the University of KwaZulu-Natal and the University of the Western Cape with 12 publications each. The University of the Witwatersrand has 10 publications. The two last affiliations are in a tie with 9 publications which are Perking University and the University of Pretoria. The majority of the affiliations are universities from South Africa with six affiliations. This is followed by the institutions from China with four affiliations. This is in line with the findings from Figure 1 which shows China and South Africa being the top two leading countries in the township economy research.

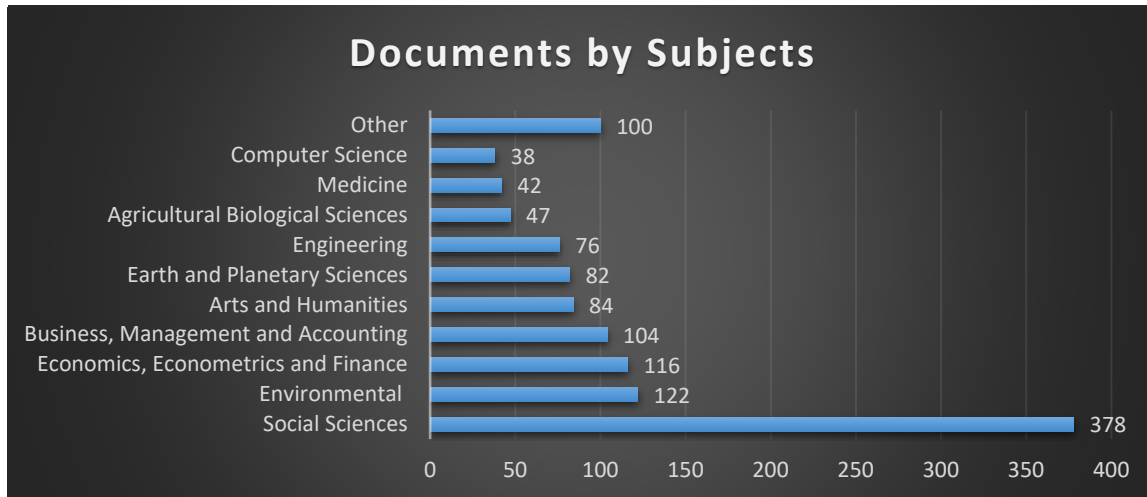


Figure 3: Documents by Subjects

Figure 3 above depicts the subjects that published documents in the township economy. The ones that are depicted are in the top ten. The subject that contributed more publications is Social Sciences which published 378. This is followed by Environmental with 122. This is less than double the publications in Social Sciences. The third subject with the highest number of publications is Economics, Econometrics, and Finance with 116 publications. The fourth subject with the highest is Business, Management, and Accounting with 104 publications. The remaining are Arts and Humanities (84 publications), Earth and Planetary Sciences (82 publications), Engineering (76 publications), Agricultural Biological Science (47 publications), Medicine (42 publications) and Computer Science (38 publications). All of these are in the top ten subjects. All the other subjects combined contributed 100 publications in total.

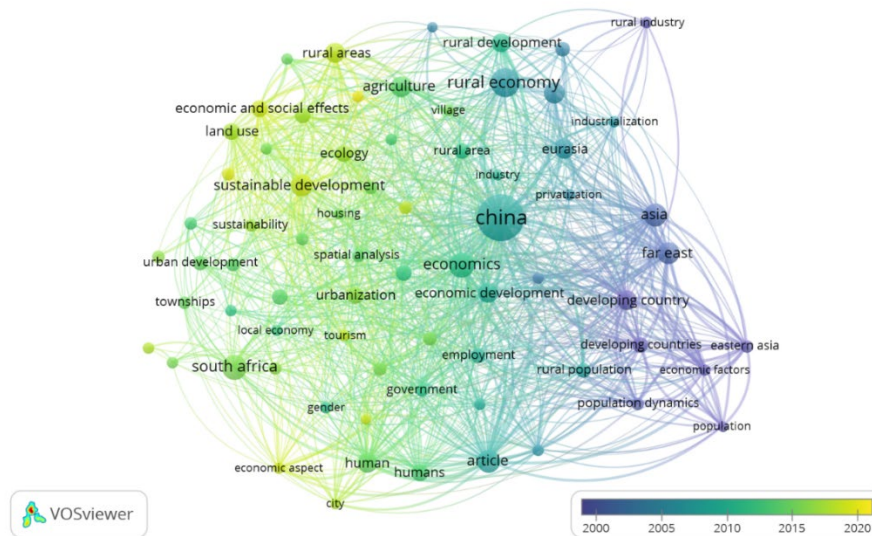


Figure 4: Network Visualisation of Keywords

Figure 4 illustrates the trends of research over the years that took place before 2000 to post-2020. Trends in research that took place around 2000 were in Asia, the Far East, and Eastern Asia. The trends were in population, population dynamics, developing, and developing countries, and economic factors. Trends that happened around 2005 focused on industrialization, privatization, rural economy, industry, and China. Around 2010 the research trends focused on economics, employment, rural areas, governments, and economic development. Around 2015 the was emergence of

massive research from South Africa, on urban economy, urbanisation, townships, housing, special analysis, humans, humans, and local economy. Post that in around 2020 the research trends focused on economic aspects, city, sustainability, sustainable development, ecology, land use, economic and social effects, and rural areas. This is how the research has evolved over the years as far as the township economy is concerned.

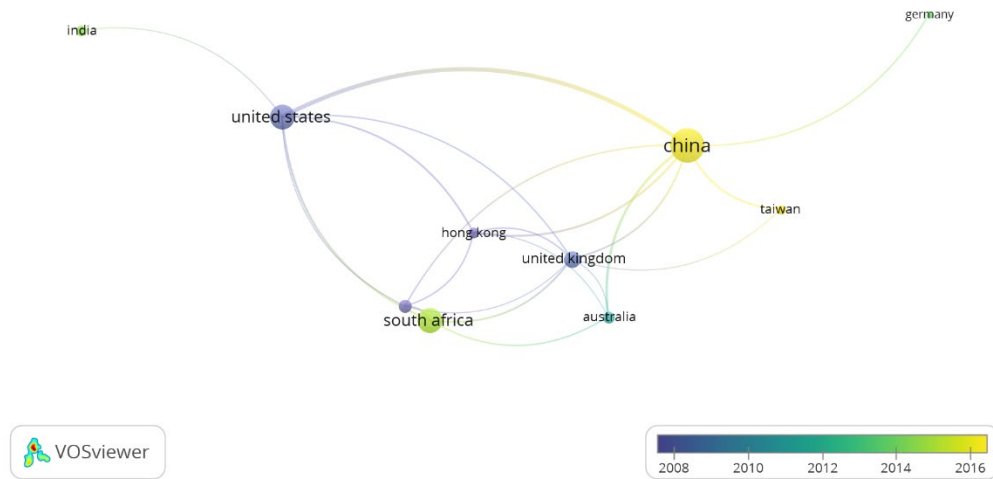


Figure 5: Overlay Network Visualisation

Figure 5 depicts the overlay network visualisation of countries, their networks, and the years in which all this happened. Around 2008, the research was largely led by the United States of America. It collaborated with India, Hong Kong, Canada, and the United Kingdom. Around 2012, Australia contributed and had links with South Africa, the United Kingdom, and China. Germany also contributed and had a link with China. Around 2014, South Africa contributed significantly. It had links with Australia, the United Kingdom and Canada. Lastly, around 2016, China contributed substantially well with several links to Germany, Taiwan, Australia, the United Kingdom, Canada, and the United States of America. Taiwan also contributed around those times and had links with China and the United Kingdom. This overlay visualisation of countries shows the trends of research trends per country over time.

5.3 Proposed Improvements

This section discusses the recommendations of the study. The recommendations are influenced by the findings and discussions of the study. Findings were derived from the data that was extracted from Scopus databases and analysed by VOSviewer.

Increase Research Output

Although South Africa is the second highest contributor of research to the township economy following China, there is still an opportunity to increase the publications. This will be significant to South Africa and its economy as many people are mostly unemployed, and semi-skilled while others are not skilled at all, and most importantly, most of them are operating their businesses informally. They rarely comply with regulations that govern businesses. This makes it difficult for them to grow. There more research produced in the townships, the more the root causes and solutions will be identified and proposed. There must be incentives for the township economy research projects taking place in South Africa. There are several research grants and incentives in South Africa. This helps increase participation and leads to innovation in the identified discipline. The research project should be in collaboration between scholars and the government department that focuses on supporting small businesses. This will help in finding solutions faced by township dwellers and the alarming unemployment rate. In their business academic programmes, institutions of higher learning should incorporate the township economy in their syllabus. Additionally, there must be national academic conferences that will strictly focus on the township economy. This will attract several academics to write about the subject. The government and institutions of higher learning should work together to develop and introduce short learning programmes on entrepreneurship education for township dwellers. This will help potential entrepreneurs to have relevant skills to start and manage their businesses. This will further help professionalise businesses in the townships. The highest problem of unemployment will be eradicated. Most importantly, the more scholars conduct impactful research the more their research will be cited and be rated as top researchers.

6. Conclusion

This study aimed at outlining and understanding who are the leading contributors to the township economy, the challenges faced by the township, and the opportunities they provide. This was achieved through the use of bibliometric analysis using Scopus databases for data collection and analysis. The data that was collected was further analysed using the VOSviewer computer program. The research objectives were achieved in this study. About 688 publications for 64 years from the Scopus database were used in this study. The first publication was first recorded in 1959 to the last paper was recorded in 2023. The top ten leading authors who are cited the most with the number of publications was identified in this study. Countries that have published and collaborated were also discussed in this study. China is the highest contributor and then followed by South Africa. It is recommended that for South Africa to increase the number of publications they contribute per year, there should be incentives and research grants for scholars who would like to do research in this discipline. Partnerships between government departments and institutions of higher learning should be forged so that they can address the unemployment crisis and professionalise township businesses. Future research should focus on the importance of social entrepreneurship in addressing challenges faced by township dwellers.

References

- Charman, A., *The South African Township Economy, and Informal Micro-Enterprises: What are the prospects for youth employment and entrepreneurship?*, Cape Town: Development Policy Research Unit, 2016.
- Charman, A., Micro-enterprise predicament in township economic development: Evidence from Ivory Park and Tembisa. *South African Journal of Economic and Management Sciences*, vol. 20, no. 1, pp. 1-14, 2017.
- Jürgens, U. & Donaldson, R., A Review of Literature on Transformation Processes in South African Townships. *Urban Forum*, 23(DOI 10.1007/s12132-012-9149-x), pp. 153-163, 2012.
- Kubone, S., *Role of supporting and stimulating the township economy and informal sector in the Gauteng townships*, Portchestrom: North West University, 2019.
- Manyaka-Boshielo, S. J., Social entrepreneurship as a way of developing sustainable township economies. <http://www.hts.org.za> *Open Access*, vol. 73, no. 4, pp. 1-10, 2017.
- Manyaka-Boshielo, S. J., Towards Entrepreneurship Education: Empowering Township Members to Take Ownership of the Township Economy. *HTS Teologiese Studies/Theological Studies*, vol. 75, no1, pp. 1-7, 2019.
- Masuku, B., Questioning governance of urban informality: A study of township economy in Alexandra, Johannesburg. *Journal of Foresight and Thought Leadership*, Volume <https://doi.org/10.4102/joftl.v2i1.20>, pp. 1-14, 2023.
- Mathibe, M., Mochenje, T. & Masonta, M. T., *Assessing the Effectiveness of 4IR Strategy on South African Township Economy: Smart Township Perspective*. KwaZulu Natal, Mbali Conference 2021 Proceedings, 2021.
- Mbambo, S. B. & Agbola, S. B., The Impact of the COVID-19 Pandemic in Townships and Lessons for Urban Spatial Restructuring in South Africa. *African Journal of Governance and Development*, vol. 9, no. 1.1, pp. 329-351, 2020.
- Naidoo, P., South Africa's Unemployment Rate is Now Highest in the World. *The Capital News*, vol. 44, no. 36, p. 15, 2021.
- Omonona, S., Oni, O. & Oluwole, O. J., 2021. COVID-19 pandemic and the South African township economy: A focus on King Williams Town, Eastern Cape, South Africa. *Harvard Deusto Business Research*, X(2), pp. 370-381.
- SME South Africa, *A Guide to South African Township Economy, 2023*. [Online] Available at: <https://smesouthafrica.co.za/sme-guides/a-guide-to-south-africas-township-economy/#:~:text=Township%20and%20Rural%20Empowerment%20Programs,help%20them%20develop%20their%20businesses>. [Accessed 18 September 2023],
- SME South Africa, *Township Business Ideas and Opportunities, 2021*. [Online] Available at: <https://smesouthafrica.co.za/township-business-trends-opportunities/> [Accessed 18 September 2023], 2021.
- Strauss, M., A Historical Exposition of Spatial Injustice and Segregated Urban Settlement in South Africa. *Fundamina*, 25(2), p. 135–168, 2019.
- van Gaalen, P., *Thriving township economy vital to SA's economic revival, 2021*. [Online] Available at: https://www.investec.com/en_za/focus/economy/thriving-township-economy-vital-to-sas-

[economic-revival.html#:~:text=An%20estimated%2017%25%20of%20South.families%20who%20lack%20formal%20employment.](#)

[Accessed 17 September 2023], 2021.

Biography

Lawrance Seseni is an Entrepreneurship Lecturer who teaches undergraduates and supervises honours and master's students at the University of Johannesburg. As part of his work in disadvantaged communities, he has initiated several developmental projects, such as conducting career exhibitions in those communities. He currently serves as the Primary Faculty Advisor of the Enactus University of Johannesburg, an international student organisation dedicated to solving societal problems through social entrepreneurship. In addition, he launched the Business Clinic at the University, as he believes that teaching students to take part in community service projects will create citizens of value. This initiative aims to help struggling SMEs in and around Johannesburg. Furthermore, he is the editor of the Department's newsletter and a houseparent in a mixed residence on campus. Among his commitments, he is the lab manager for the European Union's and Erasmus+'s Common Good First Digital Storytelling project. Participants in the Digital Storytelling Project are universities from Iceland, Norway, Denmark, Scotland, Spain, and South Africa. A major goal of this project is to showcase community-generated innovative content. As a researcher, he has had a number of his articles published in international conference procedures that are indexed by Scopus. His recent experience includes serving as a Session Chair at international conferences, reviewing conference papers, and serving as a Track Chair as well as presenting as a distinguished speaker at conferences. A Golden Key member, Lawrance Seseni is in the process of achieving his Ph.D. in Operations Management.