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**A STUDY ON TRANSPORTATION IN RELATION TO EMPLOYMENT WITHIN THE
GELVANDALE COMMUNITY IN THE NELSON MANDELA BAY**

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RESEARCH METHODOLOGY

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I, Joy Jansen hereby declare that the Research Report submitted for the honours degree to The Independent Institute of Education is my own work and has not previously been submitted to another University or Higher Education Institution for degree purposes.

ABSTRACT

The following report dealt with transportation in relation to employment. The main aim of this study was done to determine how the unavailability of public transport has affected residents within the Gelvandale community. This report explains the importance of transportation as well as what an effective transportation system can result in and solve. This research study focuses specifically on the Gelvandale community within the Nelson Mandela Bay in the Eastern Cape. A societal issue such as transportation has become a well-known challenge within communities and affects factors such as employment. Effective transportation systems can provide better mobility for individuals within communities. The report consisted of a qualitative research method. Research was undertaken by utilising focus groups which was conducted within the Gelvandale area. This assisted the researcher to establish the various experiences and affects of transportation and whether it is effective and efficient.

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CHAPTER 1

INTRODUCTION

Transportation remains a societal challenge and it affects many factors such as employment (Brand South Africa, 2016). Mobility is very important in modern society as people need to reach their respective destinations for example; their place of work. Public transport is defined as “a system of vehicles such as buses and taxis that operate at regular times on fixed routes and are used by the public” (Cambridge University Press, 2019).

Available public transport can make a significant contribution towards mobility issues that communities face. Alleviating societal issues such as transportation in the Gelvandale community can increase mobility and help members of the community to reach their place of employment. Furthermore, if improved and efficient transportation systems are implemented, better solutions can occur for the Gelvandale community (Brand South Africa, 2016). This research report deals with how transportation affects employment in the Nelson Mandela Bay Gelvandale Community.

Solving societal issues such as the unavailability of public transport involves a number of people. These people can be involved in government, non-profit organisations, and public and private institutions as well as communities (Agostini, 2016:2). Individuals depend on public transport in order to be mobile as it benefits communities (European Central Bank, 2018).

This research will explore the affects of the unavailability of transportation, specifically public transport in the Gelvandale community within the Nelson Mandela Bay.

1.1 Historical background

Transportation systems have been implemented to address societal challenges (Diab, 2015:1). Transportation includes various types such as public transport that can improve community mobility issues for example by trying to alleviate transporting people to their respective place of employment. In order for a transportation system to be effective it requires skills and feasible ideas where individuals can effectively contribute their time and

knowledge through developing new ideas that could possibly improve or solve transportation issues (Diab, 2015:1).

Furthermore, availability of transportation can change individual's lives for the better and create opportunities for society that can further improve their standard of living. Available transport is a key contribution in terms of enhancing people's capability to be more mobile and maintain employment (Diab, 2015:1).

Government have taken the initiative towards improving transportation systems through implementing public transport. However, it is not effective and efficient (Brand South Africa, 2016). This in turn has many non-profit organisations becoming more involved in trying to combat transportation issues as this affects factors such as employment (Brand South Africa, 2016).

1.2 Contextualisation

The following key concepts are defined and will be used throughout the study. The focus of this research study is about transportation and the following concepts play an important role. Providing transportation, specifically public transport involves how the various governmental institutions and stakeholders play a part in solving this societal issue within the Gelvandale community.

Concept	Description	Source
Transport	The ability to take people or goods from one location to another.	(Oxford Dictionaries English, 2019).
Transportation infrastructure	"A framework that supports a transport system". In this instance; public transport that includes: buses and taxis.	(Askaboutireland.ie, 2019).
Public transport	system of vehicles such as buses and taxis "that operate at regular times on fixed routes and are used by the public"	(Dictionary.cambridge.org, 2019).

1.3 Rationale

The rationale of this research study was to investigate how transportation affects employment in the Nelson Mandela Bay Gelvandale Community. This topic was selected as transportation is a societal challenge. This study is important as it will contribute to the community in terms of gaining insight into what the affects are of transport, specifically public transportation. Addressing societal challenges like transport in communities such as

Gelvandale can lead to the improvement of community member's well-being in the Gelvandale Community and the ability to have better access and maintain employment. Available transport can result in economic growth and improve standards of living for the residents within the Gelvandale community (Googleweblight.com, 2019).

1.4 Problem statement

The majority of individuals do not have any form of transportation as it has been reported that people are unable to reach their place of work due to the unavailability of transport, specifically public transport (Kodwa, 2014). This causes those that are employed to possibly lose their jobs (Kodwa, 2014). It is a concerning factor as members of the Gelvandale community within the Nelson Mandela Bay depend on their jobs to provide for their families.

1.5 Purpose statement

The purpose of this study was to investigate what the affects are of transportation in relation to employment (Kodwa, 2014). This research aimed to gain an in depth understanding of how transportation has affected members within the Gelvandale community and their various experiences. The researcher used appropriate collection methods to investigate how transportation affects employment in the Gelvandale community and searched for possible solutions that could be implemented to combat this problem (Kodwa, 2014).

1.6 Research question

How does transportation in the Nelson Mandela Bay Gelvandale community play an important role with regards to employment?

In relation to the study, the following general questions could be posted:

- What is transportation infrastructure?
- Why do we need an efficient and effective transportation infrastructure?

1.7 Objectives

The purpose of this study is to assess how transportation in relation to employment affects the members of the Gelvandale community. The following research objectives would facilitate the achievement of this aim by analysing the following

- It aims to identify what a transportation infrastructure is and;
- Identify why an effective and efficient transportation infrastructure is needed.

CHAPTER 2

LITERATURE REVIEW

In the literature review, secondary sources was utilised regarding transportation. When conducting a research study, the literature review is very important, as “a literature review assist the researcher to gain an understanding of the research topic, including theories, vocabulary and the various methodologies used for similar research” (Randolph, 2009) (Unisa, 2018). For the purpose of this study, a literature review will be discussed pertaining to the concept of transportation.

Transportation is an emerging concept, (Dimitrijevic, 2018). In the current study, previous literature regarding transportation in relation to employment within the Gelvandale community in the Nelson Mandela Bay was explored. The unavailability of transportation, specifically public transport decreases the ability of individuals to be mobile and to reach their place of employment (The Innovation Policy Platform, 2013). Furthermore, Gabriel

Tarde’s social theory will be discussed in relation to transportation and employment, as well as the international state of transportation and the local state of transportation.

2.1 Gabriel Tarde’s social theory

Gabriel Tarde’s theory allows the researcher to widen the perspective of social theory which was narrowed to certain factors such as: economic and technological innovations by Schumpeter to include social innovations and in this instance improvement of public transportation.

Tarde bases his theory on laws and practices on social development. This allows the researcher to discover how social phenomena, constructs and conditions come into being and transforming communities (Howaldt et al, 2016:2). Social development with regards to transport assists individuals who do not have any form of transport to utilise the public transport system such as the bus and taxi to reach their desired destination (Howaldt et al, 2016:2).

The integral characteristic of Tarde's social theory is 'inventions' which is the main driver of social development (Howaldt et al, 2016:2). In this research study the invention refers to improved methods of utilising public transport that could possibly result in employment.

According to Tarde, the central mechanism of social reproduction is invention and imitation. In the context of social reproduction the majority of things that take place are due to invention and imitation. The benefits of imitation are due to the similarities of social origin. In the context of 'social' it relates to society or the challenges that societies face and in this instance, transportation (Howaldt et al, 2016:2). Added to this are individual initiatives in the form of service delivery by transporting individuals who are immotile and government intervention by providing and improving transport sectors specifically public transport as this leads to social innovation (Howaldt et al, 2016:2).

However, instead of individual intervention it would be more meaningful to work as a collective group towards improving the public transport system. Government organisations continue to explore social innovative programs to bring about change and look for various ways to combat societal challenges such as the unavailability of public transport (Howaldt et al, 2016: 6).

As stated by Schumpeter (2016) there has been progress with regards to new innovations in social development in transportation sectors. Although new innovation is only successful if there is commitment by actors such as the government when implementing programs to improve society. (Howaldt et al, 2016: 2).

Innovation does not necessarily refer to new methods, but the improvement of existing challenges for example improving the current public transportation sector and modes of transport. These changes result in societal change and improvement and in turn can result in employment (Howaldt et al, 2016:7).

Even though exploitation takes place as those who are involved might participate for their own financial gain. With regards to new inventions such as funding, government needs to intervene and allocate the necessary capital to combat societal issues to ensure the sustainability of communities. As the improvement of public transport leads to members of

the community reaching their place of work that results in an improved standard of living (Howaldt et al, 2016: 8).

2.2 International state of transportation

The unavailability of transport is not only a factor that is experienced within the Gelvandale community but internationally as well. Transportation is vitally important to the wellfunctioning of economic and social activities. It is important to ensuring cohesion of populations. Transport ensures everyday mobility of people and is crucial to factors such as production and employment (Niches-transport, 2018).

Countries are experiencing the challenges rooting from the unavailability and inefficient supply of public transport. As a result of these challenges there is a great demand for social innovation initiatives that will combat or improve the current situation (Howaldt et al, 2016:5).

Innovations in transportation are taking place for example in United Kingdom. The Birkenhead Bus Station is a passenger friendly interchange that promotes better access for individuals, increases passenger satisfaction and increase in public transport modal share (Niches, 2018:12). Better access for individuals will decrease the time spent on passenger congestion and individuals can reach their place of employment in due time (Niches, 2018:12). Public transport modal share refers to developing sustainable transport within a city and in this instance the Gelvandale community. It usually encompasses an increase in the proportion of trips made using sustainable modes that will allow individuals to move around and reach their respective place of work (Niches, 2018: 13).

In the Netherlands, public transport stations and stops such as metro, tram and buses are well equipped with storage for bicycles. This increases the usage of public transport and bike usage that further results in a shift towards sustainability and reduced costs. Majority of Dutch households own at least one bike as this cuts downs on fuel costs and avoiding traffic which will allow members of the Gelvandale community to get to work on time (Niches, 2018:14).

In France, the utilisation of buses is a priority and the main form of public transport. Bus Rapid Transit (BRT) connects districts and suburban areas. This form of transport is cheap and reliable (Niches, 2018:16).

Transportation innovation requires effective planning, resources and funding which is not always easy to obtain. The government needs assistance and contributions with regards to implementing an efficient and effective public transport system. The funding gap that is experienced is due to market forces that lack encouragement and commitment to contribute towards capital in order to fund transport systems. New ideas and innovative programs with regards to the improvement of transportation in communities require capital, time and determination to deal with such long term issues (Brand South Africa, 2016).

It can be extremely difficult for non-profit organisations to obtain capital for new projects and it requires individuals to solve issues in a strategic manner with high levels of determination and commitment to meet the goal and objective of successfully accomplishing initiatives such as transportation projects. 'The driving force of social change' is a large social innovation project that takes place in Europe, and more than a thousand innovation programs have been implemented in various contexts such as unemployment and transport (Howaldt et al, 2016: 2).

Social innovation in factors such as transport and mobility have been a constant social challenge and strategies have been implemented in countries such as New Zealand, Australia, South Africa and North Asia (Howaldt et al, 2016: 2).

2.3 State of transportation in South Africa

The African population is expected to grow by approximately 2.4 billion people by 2018 (Nwuneli, 2018). In order to make provision for this population, Africa needs to strategically invest in innovations that include transportation (Nwuneli, 2018). Even though there are social entrepreneurs and various innovators who are responding to transportation needs, the difficulty lies with producing feasible initiatives, obtaining funding and dealing with partnerships (Nwuneli, 2018).

Van der Merwe, Chief Executive of the Gautrain Management Agency states “There is a lot of public transport happening (such as buses, trains, road infrastructure and more vehicles on the road) but it’s fragmented and not co-ordinated. It is also a mode of force (utilising public transport such as bus, taxi and train) because many people who use public transport have no other option (Nwuneli, 2018). It is possible that in the minds of the communities the perception of public transport will change if there are significant developments that show a safe and reliable mode of commuting such as an increase in buses (Nwuneli, 2018).

The Passenger Rail Agency of South Africa (PRASA) merged the South African Rail Commuter Organisation (commuter rail services), Metrorail (commuter rail services in the major urban areas of South Africa) and Shosholoza Meyl (operates long-distance passenger rail service) into one organisation. The goal was to improve efficiency and accountability, innovation and reverse the decline in commuter rail services. However this has not occurred (Jennings, 2015).

PRASA rail operations are still facing challenges which include: a dispute with Transnet about access to its network, poor maintenance practices and pricing of services (Aropet, 2017). Fortunately commuters are not left to rely solely on PRASA to commute. Various metros such as Johannesburg continue to invest in reliable modes of transport. In Gauteng the three biggest metros- Johannesburg, Ekurhuleni and Tshwane are providing funds to ensure a reliable and modernised bus rapid transit (BRT) system (Walters, 2014).

A reliable and efficient BRT system will benefit commuters that utilise public transport. In order for this to take place South Africa needs to deal with societal issues such as transportation and the application of policy makers would be needed with regards to providing new ideas (Claus et al, 2014:2). One of the most important tools to assist in dealing with societal challenges are community participation, this plays a vital role in community progress and development (Claus et al, 2014:2).

2.4 Local state of transportation

One of the main issues in South Africa is the public transport industry. It is under immense pressure as users of public transport face unreliable, unsafe and costly systems (Walters,

2014). These factors affect social development and individuals standards of living as they are not able to reach their place of work or desired destination (Walters, 2014).

A National Household Travel Survey in 2013 revealed that 68.8% of South African households use taxi services on a daily basis, 21.1% commuter buses and 9.9% rail operations (StatisticsS.A, 2014:6). This indicates that most individuals rely on public transport and utilise public transport on a regular basis.

Regardless of the different modes of transportation, South African transport is still faced with further challenges such as lack of transport and public transport in rural areas as well as congestion (Jennings, 2015).

Aropet (2017) states that if there is provision made for safe, affordable and easy accessibility to public transport it will result in an improved socio-economic development and growth in South African population as more individuals will maintain their jobs and earn an income (Aropet, 2017). In addition, it also has the potential to provide for improved and working opportunities for those that are employed and prospective employees (Aropet, 2017).

Apartheid has left South Africa with a legacy of social segregation and a separation of individuals from social services and their place of work that requires them to live a productive life. The challenge for post-apartheid has been to restructure these geographies by providing and then implementing an effective and improved system of public transports that will contribute to assisting individuals who do not have any form of transport in order to be mobile and be employed (Walters, 2014).

However, there are ways that could effectively assist in solving transportation issues. The following strategies could be implemented to improve public transport challenges: effective planning that could increase accessibility that can provide an integrated transport system for individuals that live in rural areas (Mthimkhulu, 2017). In South Africa, with regards to the minibus taxi industry there needs to be strategic and stringent guidelines for taxi drivers for example valid licenses, roadworthiness and defensive driving as well as first aid training (Mthimkhulu, 2017). Drivers who do not have these requirements decrease the availability of public transport on the road and individuals are left with no form of transport to move

around. Transport infrastructure generally takes place after an area has been developed. “Developments need to be alongside already existing infrastructure as this will reduce the need for huge capital investments required to build transport infrastructure” (Mthimkhulu, 2017).

Accessibility for modes of transport to enter into various areas such as the Gelvandale community need to be improved as this will allow members of the community to reach their place of work and an increase in employment. Various issues need to be addressed for a more effective, accessible and inclusive system of public transport to exist in South Africa.

2.5 What is a transportation infrastructure

In a study conducted by Dr. Jean-Paul Rodrigue and Dr. Theo Notteboom (2018), it was stated that transportation infrastructure refers to systems that are implemented within various contexts; such as road public transport. Transportation infrastructure forms an integral part of the transport system in any city and community, in this specific study; the Gelvandale community (The Geography of Transport Systems, 2019). At a general level it provides economic prosperity that includes employment, it leads to effective functions of economic and social networks (Ecosystemserviceseq.com.au, 2018).

2.6 Why do we need an efficient and effective transportation infrastructure

A well developed transportation infrastructure is needed for the development and improvement of welfare in communities to improve economic conditions such as: the social aspects of a community. There are many individuals within communities and government that can actively engage in improving and assisting with upgrading the transport system; specifically public transport as this positively affects individuals who are employed to maintain their jobs and increase mobility (The Geography of Transport Systems, 2019).

Transportation infrastructure is an extensive and an important component of the economy and contributes to community development. Where opportunities regarding the economy have been increasing in relation to the mobility of factors such as: the movement of people. It is evident that there is a relation between the quality and quantity of transport infrastructure as well as levels of economic development (Wang et al., 2019). Efficient transport systems provide economic opportunities and social benefits to communities and the economy (Wang

et al., 2019). This result in multiple effects such as: employment, social entrepreneurship and additional investments. When transport systems are poorly implemented or unreliable it can result in economic costs such as: a decrease in the quality of life and missed entrepreneurial opportunities (Wang et al., 2019).

2.7 What are the benefits of an efficient and effective transportation infrastructure and how it benefits the communities

The availability of transport specifically public transport benefits communities who do not have their own means to be mobile or to reach their place of employment. Members of the Gelvandale community have chosen to start their own form of service delivery and public transport to earn an income and help those in need (The Geography of Transport Systems, 2019).

Communities are willing to participate and engage in projects that will assist in the improvement of making public transport available. This will result in an increase in employment by members reaching their respective place of work (The Geography of Transport Systems, 2019). However, the mode of transport, such as taxis are not reliable and roadworthy and as a result of the poor quality of transportation this leads to increased cost per trip and commute times to areas within Gelvandale (The Geography of Transport Systems, 2019).

The world is constantly evolving and individuals need to adapt to change that will improve their lives and standard of living. Numerous social issues from transport to employment are arising. The involvement by communities can lead to social entrepreneurship, where they can start their own service delivery by providing public transport to those who do not have their own form of transportation. The collaboration of members of the community and those seeking employment can brainstorm ideas regarding the unavailability of public transport within communities (The Geography of Transport Systems, 2019).

The core focus of social challenges such transport and employment are faced by the government as they need to understand and address these issues and find strategic ways to combat these challenges that are faced in communities. The government has a National Development Plan where certain goals have been set out that they plan to achieve by the

year 2030. These goals include: creating employment opportunities and combating public transport issues (Brand South Africa, 2016).

Public transportation systems have many advantages for communities, individuals and local economies. Fixed route transits are still more efficient and beneficial as it gets people from one place to another. In addition, the following are benefits of public transport, specifically: buses, trains, shuttles and taxis.

It benefits communities in a financial way as they are reaching their place of work to earn an income. Public transport is environmentally friendly and transporting people is done more efficiently and “produces less air pollution per passenger mile than a standard car carrying a single driver”. It is cost effective as individuals utilising public transport saves money on gas and maintenance and an increase in mobility as those who do not own their own car can use public transport such as the bus, shuttles and taxis (Essays, UK, 2018). Public transport not only contributes to the economy but it brings financial benefits to society in the form of jobs and increases mobility for job commuters.

2.8 Transportation infrastructure in the Gelvandale community

The Nelson Mandela Bay consists of local governments, government agencies and nongovernmental organisations. Their purpose is to improve the city and its well-being. These government agencies and organisations investigate what societal problems or challenges there are within communities such as transport and employment and possibly try to combat and implement new ways of improving the community (Hancock, 2017:2). Key opportunities are identified within the Nelson Mandela Bay by stakeholders to devise and make strategic decisions to improve the city. Building relations with members of the community to motivate and encourage small innovations that will result in a big difference (Hancock, 2017:2).

Small innovations by government agencies and non-governmental organisations contribute to the improvement of members of the Gelvandale community, as transport and employment are factors that affect individuals who reside in Gelvandale as they become dependent on government to provide these services such as public transport that will be able to allow these members of the community to reach their place of employment (Hancock, 2017:3).

CHAPTER 3

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Paradigm

A research paradigm guides the research to obtain an answer to the specific research question under study. In this instance, the most appropriate paradigm is Interpretivism. Interpretivism is the idea that objects and people are fundamentally different and research cannot be conducted in the same way as people experience things differently and has different perspectives with regards to how transportation in relation to employment has affected the lives of residents within the Gelvandale community in the Nelson Mandela Bay (Pham LAN, 2018:3).

A research paradigm helps the researcher to gain a deeper understanding of the objects of empirical tests. In addition, Interpretivists have adapted a relativist ontology in which researchers may study a single phenomenon that has various interpretations (Pham LAN, 2018:3). The members of the Gelvandale community have different opinions on the unavailability of public transportation. An Interpretivists approach will assist in analysing what the different perspectives are regarding the phenomena on transportation in relation to employment.

Interpretivists can describe humans, events and objects and in addition also deeply understand humans in a social context. The researcher can look into the participant's values, thoughts, perceptions, feelings and views during an interview as this will be beneficial to the researcher to gain better insight to finding out how the unavailability of public transport affects them. Interpretivists are conducive to the study as they are interactive, cooperative and participative which is needed in order to understand many aspects such as the different experiences and affects of the research problem. Interpretivism deals with information regarding the type of problems individuals are challenged with and how these challenges are dealt with (Du Plooy-Cilliers, 2014:19).

3.2 Research design and approach

The type of research method used was a qualitative design. A qualitative research study is defined as "a form of research that uncovers an understanding of people's behaviour and

the reasons behind behaviour” (SIS International Research, 2019). The reason why the researcher used a qualitative research approach is because qualitative research allowed the researcher to understand human behaviour and different experiences with regards to gaining an in depth understanding of how transportation affects the Gelvandale community (Classroom, 2019).

The deductive approach was used as it fits within the parameters of the research study. It narrows the study from a general to a more specific area. The researcher reviews what others have done, existing theories and used the information as a guideline for the specific research topic understudy (Saylordotorg.github.io, 2019).

3.3 Population

The population of this research study was targeted at the members of the Gelvandale community in the Nelson Mandela Bay, more specifically those who utilise public transport. The reason for the selection of these members is due to the fact that the participants reside in the Gelvandale community and are affected by this societal issue.

3.4 Sampling

A non-probability sampling method was utilised in this research study. Sampling methods refers to a system where a collected sample through a process restricts participants an equal of being selected.

Non-probability sampling includes various methods and in this research study convenience sampling was used. The reason for convenience sampling is that members are easily accessible for the researcher, it is cost and time effective and the most commonly used method (Explorable, 2018).

The sample size to be used in this research study consisted of eleven members in the Gelvandale community that relies and utilises public transportation.

3.5 Data collection method

Qualitative researchers are often interested in human experiences that include personal and subjective curiosity that are “characteristics of individual experience and meanings

associated with a particular phenomenon” (Du Plooy-Cilliers, 2014:173). For this research report it focuses on transportation in relation to employment within the Gelvandale community in the Nelson Mandela Bay.

The researcher utilised a qualitative data collection method that aimed to explore, understand and describe the topic under study. The concept of design relates to constantly arranging the research question, purpose, goals and methods that was specified within the paradigm. It was important to remain consistent and to ensure the golden thread throughout the entire research report (Du Plooy-Cilliers, 2014:173).

To assure validity and trustworthiness it was crucial to align the data collection, analysis, and interpretation methods to the research goal and question (Classroom, 2019). The data collection method that was utilised in this research report consisted of a focus group. An interview with the ward councillor of the Gelvandale community, Mr Jordan, was arranged whereby the researcher had the opportunity to listen to the views and opinions regarding the research topic. The information provided by the councillor assisted the researcher to gain a deeper understanding and insight about the current situation regarding transportation in the Gelvandale community.

The interview with the ward councillor took place in a certain setting; Gelvandale community ward councillor office, where a set of standardised, open-ended questions were asked. The focus group which included the participants of the Gelvandale community were free to express their views and opinions as this created a free exchange of ideas between the individuals that were selected. The responses from the participants were recorded and the researcher used appropriate technology to capture the data during the discussion.

The focus group consisted of eleven participants and the facilitator. The participants were gathered for the purpose of determining their experiences, opinions and attitudes regarding the phenomenon: transportation in relation to employment and the individuals were interviewed simultaneously by the researcher.

The advantage of utilising a focus group was that the questions could be clarified, the response rate was high and the researcher had the opportunity to build a bond with the participants thereby ensuring trustworthiness and cooperation (Evalued.bcu.ac.uk, 2019).

3.6 Data analysis method

The process of qualitative data analysis is to structure and bring meaning to the data. The process involves reduction of information, identification of patterns/themes/words and experiencing the essence of what the data reveals (Onuoha, 2017). Hence the most common denominators of a qualitative analysis method are organisation, reduction, interpretation and substantiation of information (Onuoha, 2017). There are various qualitative data analysis methods, however, in this research report a qualitative content analysis will be utilised.

Qualitative content analysis was used to explore and identify themes and patterns from the information provided. It paid specific attention to unique themes that illustrated the various meanings of the phenomenon (Onuoha, 2017). The idea was to group the data together utilising a coding system that made the process of analysis more manageable. Thematic coding was used which was a process of data reduction by means of manually identifying various themes and patterns (Onuoha, 2017).

Drawing conclusions from the coded data involved interpretation of themes that were identified. The researcher made inferences of the meanings that were derived from the data, explained the different views and took factors that affected the problem into account to avoid misinterpretation (Onuoha, 2017).

CHAPTER 4

4 FINDINGS AND INTERPRETATION OF FINDINGS

The following section presented below relates to the objectives of the study regarding how transportation in relation to employment affects the Gelvandale community in the Nelson Mandela Bay as explained in the literature review. The findings indicate all the information that was stated and explained by participants within the Gelvandale community. Eleven individuals were interviewed in the form of a focus group. Two of the participants who were invited to be interviewed consisted of the previous and current ward councillors of the Gelvandale community.

4.1 Research findings

Based on the findings from the interview that was conducted at the Gelvandale ward council office with the previous and current ward councillors of the Gelvandale community as well as the information provided from the remainder of the participants within the Gelvandale area assisted the researcher to determine whether or not transportation in relation to employment has affected individuals within the Gelvandale community, and whether any initiatives have been implemented to improve the current transportation system to solve the societal issue being faced within the Gelvandale community in the Nelson Mandela Bay.

The interviews that were conducted were recorded; the duration was 30 to 60 minutes long and consisted of thirteen questions. The questions assisted the researcher in drawing conclusions and finding themes and patterns of the affects of the research phenomenon.

One of the problems within the Gelvandale community that were mentioned by majority of the participants is factors contributing to whether or not public transport will be utilised. These factors include: distance, cost, availability and gang rivalry. To address this problem the above mentioned factors were discussed with the ward councillor.

The response was that the allocated capital for transportation has been spent on the existing transportation system and that there are no additional funds to solve these factors. However, with regards to distance individuals would have to utilise feeder taxis or walk to the nearest

commute location. The ward councillor mentioned that gang rivalry has gotten worse and that police force would have to implement new and better initiatives to reduce gang rivalry.

An additional problem is the unavailability of public transport. The researcher stated that perhaps the members of the community do not know what the commute times are and that it should be made known in order for people within the Gelvandale community to be able to utilise public transport such as the bus or taxi as majority utilises public transport for work and university purposes.

The following question was asked with regards to the effectiveness and efficiency of the current transportation system. The researcher addressed this question as key areas within the transportation system needs to be improved or changed.

The majority of the participants stated that it is inefficient and ineffective. The most common factors that were mentioned were due to poor planning and road infrastructure. These factors are the reason that the transportation systems within the Gelvandale community are not working effectively as stated by the participants.

One of the problems that were mentioned relating to what factors contribute to the successful integration of a transportation system as the researcher needed assistance as to what the participants thoughts were and how it can be improved.

All the participants involved stated community development and involvement as well as governmental support (in the form of funding, resources and implementing social programmes). The participants felt that in order for the system to work accordingly these two factors would be play an important role in the success of integrating a transportation system.

The above mentioned questions and responses assisted the researcher in drawing conclusions and finding themes and patterns of the affects of the research phenomenon.

Summary

In conclusion, these findings have provided the researcher with a deeper understanding with the investigation into the study of transportation in relation to employment within the

Gelvandale community. The results captured above indicate the participant's responses and how they have been affected and their experiences with regards to the public transportation system within the Gelvandale community which is causing big problems for members.

4.2 Research report

The research study was conducted as communities today experience major problems with regards to transportation. Therefore an effective public transportation system needs to be implemented to solve or improve transportation issues and contribute to creating a better life for members of the Gelvandale community.

The following report below indicates the data that was captured and interpreted by the researcher with regards to solving the research question and indicating how the members of the Gelvandale community have been affected by the unavailability of public transport.

Interpretation of findings

The individuals who have participated in this research study reside within the Gelvandale community, which is a northern area. The members selected all utilise public transportation.

The largest proportion of participants stated that there is a need to improve the transportation system within the Gelvandale community. All participants are aware of the current situation of public transport that being the unavailability thereof, and felt that an improved system and initiatives should be implemented as it affects factors such as employment.

In relation to objective one public transport is currently provided by the Integrated Public Transport System (IPTS) a state owned bus system, Algoa Bus state subsidised bus company and private taxi transport. The most common mode of public transport utilised by the Gelvandale community are bus and taxi. It appears that majority of the individuals utilise public transport to travel to work, university and school during the most popular times from 6am to 7pm on a daily basis.

However, there are various factors that influence whether or not the members of the community utilise public transport. It appears that most of the participants stated similar factors such as: distance, cost, crime, availability and time.

All these factors mentioned above impact the lives of the Gelvandale community and their families as well as the ability to utilise public transport to be able to reach their place of employment or respective destinations.

One of the participants, that being the ward councillor of Gelvandale, Mr Jordan, stated that crime is affecting taxi transport, the only public mode of transport that runs into Gelvandale and that the main route runs across the periphery of the community and there are no feeder taxis linked to the IPTS (bus system) for Gelvandale. He further stated that greater vigilance by South African Police Service (SAPS) is needed.

With regards to cost the current state model of financing the IPTS (bus system) is unaffordable and unsustainable. An amount of R2.5 billion was spent on this project (IPTS) which could have been utilised more effectively. In addition, the Nelson Mandela Bay Municipality informed communities of a fare increase on feeder route of the IPTS system. The increase took effect on 1 July 2019. (Refer to Annexure A).

In line with the literature review, several of the interviewees stressed the direct relationship between availability and infrastructure development. Apartheid residential spatial planning results in one major route instead of a number of connecting routes to the residential area. Due to densely populated areas close together it would include huge infrastructure development to take place and currently with the main routes there is no space.

One of the questions that were raised was whether or not there are any contingency plans for strategies that do not work. It appears that there are no contingency plans in place and the municipality has to make the system work. However, PRASA has a long-term railway line plan for the Northern areas of Port Elizabeth.

Similar research carried out in Columbia showed that the IPTS is a copy-and-paste with regards to the implementation of the bus system that is currently being implemented within the Nelson Mandela Bay. However, the integration of public transport is ineffective due to totally different circumstances.

Several interviewees stated that a complete culture change is needed within the Gelvandale community to make a transportation system effective. Majority of the participants were in agreement with the ward councillor with regards to cultural change as strategies that work effectively in places such Columbia cannot be implemented in the same way as within the Nelson Mandela Bay.

Majority of the individuals stated that it is difficult to implement a public transportation system within the Gelvandale community due to certain factors that include: a high rate of violence and vandalism, funding, miscommunication, poor road infrastructure, resources and lack of community support.

Lack of leadership from political parties and the government was a common complaint with regards to development and execution of a public transport system. Many interview comments mirrored the findings of the ward councillor in terms of what a successful transport system should entail. It appears that the most common factors include: affordability, safety, reliability and accessibility.

A number of interviewees stated that they found it necessary for community involvement as it is a great way to expand networks in terms of support from agencies such as nonprofit organisations and funding from potential investors. Opinions differed around the feasibility of implementing a new transportation system, with most stating it would be difficult to gain sufficient resources, structures and funding especially with the amount of money that has already been spent.

In relation to objective two an additional factor that was highlighted was location, because of the need for proximity to utilise public transport within the Gelvandale community. An interviewee stated that having to relocate is a barrier. However, the majority of the participants stated they do not mind travelling but it is the length of time that is an issue as it affects their mobility in terms of going to and from work. At the same time, a male participant mentioned that men are more willing to uproot their families to get advancement, while women will not or cannot. Relocation is not always easy or optional as it forces individuals of the Gelvandale community to spend more money on relocating and possibly work in an environment they do not enjoy.

It is possible that perhaps in the minds of the Gelvendale community members, that if costs are reduced, improved safety measures are implemented, reliable transport provided and better accessibility to public transport is made available it will contribute to a successful transportation system.

It is certain that once the transportation system is fully operational and effective it would play a very crucial role in bringing communities closer to job opportunities and thus contributing to the economy.

Summary

In conclusion, the interpretation of the results above has indicated in detail what the human experiences and effects are of transportation within the Gelvendale community. Participants have given an in-depth response which helped the researcher to gain a broader aspect of the research phenomenon. The researcher built a bond with the interviewees to ensure trustworthiness as this assisted in gaining additional information as the participants felt more comfortable knowing that information provided was dealt with a high level of professionalism.

CHAPTER 5

5.1 Ethical considerations

When conducting a research study it is important to consider the ethical considerations of the participants involved (Fouka&Marianna, 2018). The following factors such as; privacy, consent and confidentiality should be taken into consideration when conducting the research. Members of the community may request to remain anonymous or informed consent by protecting the participant's identity when conducting the research study (National Institute of Environmental Health Sciences, 2019).

The researcher must inform the participants what the research is about. For the purpose of this study the researcher will ensure quality and integrity of the research, seek informed consent, respect the confidentiality and anonymity of the research respondents and ensure that the participants will participate in the study voluntarily.

5.2 Limitations

There are various limitations in a research project such as: budget, time and resources. In this specific study, time constraints refer to the limitations in a research studies critical path. For example, the researcher was confined to completing the portfolio of evidence within a six month period.

CHAPTER 6

6.1 CONCLUSION

The report has presented transportation as a whole and the importance of how an effective transportation system can make a significant contribution to society. It dealt with human experiences and effects it has on members within the Gelvandale community that utilise public transport. The focus group and literature assisted the researcher to complete the report by determining what the affects are of unavailable public transport within the Gelvandale community in the Nelson Mandela Bay.

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7. ANNEXURES

- A. Nelson Mandela Bay Public Transport Document
- B. Questionnaire
- C. Interview (Ward Councillor)
- D. Ethical clearance letter
- E. Safe assign (Plagiarism percentage)