



**SCHOOL OF APPLIED HUMAN SCIENCES**

**Public Transit and Crime. An exploratory study on commuter's perceptions of crime in  
Metrorail trains: A case study of Durban station.**

By

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Submitted in partial fulfilment of the  
Requirements for the degree of Master of Social Science

At the University of KwaZulu-Natal

School of Applied Human Sciences

## **DECLARATION**

This is to confirm that this  
Thesis is my own work which  
I have never previously submitted to any other university for  
Any purpose. The references used  
And cited have been acknowledged

Signature of candidate.....

On the .....day of ..... 2021

## **ACKNOWLEDGEMENTS**

Throughout the writing of this theses I have received great deal of support and assistance, I would like to thank the following people who played a special role in my academic accomplishments.

First and foremost, I would like to thank God almighty for the wisdom bestowed upon me, strength, courage and good health in order to finish my research.

To my family and friends, thank you for always encouraging me and your persistent support in my undertaking of this research.

To my beloved supervisor Dr Londeka Princess Ngubane, thank you for the continuous support of, your kind endless help, generous advice and for always believing in me.

To my participants, thank you for taking your time to participate in this study. All the information and experiences each of you shared with me will forever be admirable. Without all of you completion and submission of this theses would not have been possible.

To my language editor, Linda Coertze thank you for the proofreading and lay- out of my theses. All the best for all your future endeavours.

In addition, I would like to thank Passenger Rail Agency of South Africa management in Durban station for giving me authority to interview train commuters.

## **ABSTRACT**

Rail transport is regarded as the cheapest mode of on-land transport for commuters who need to travel to and from work or school. It has distinctive characteristics that, over the years, have made it popular as a cost-effective mode of transport that accommodates a high number of people and reduces road congestion. It is an undeniable fact that railway transport has played an important role in many countries' social and economic development. However, generally tolerant rail commuters in the city of Durban, KwaZulu-Natal, have become increasingly frustrated at the declining quality of rail service delivery. This is evidenced by recent incidents of angry commuters who burnt trains due to failed rail assets, particularly in the Western Cape. These acts have been contemplated as a commuter strategy to enforce and guarantee service improvement by the operator, regardless of the negative effects they have on rail infrastructure and the economic wellbeing of the country as a whole.

In terms of Metrorail services, the inconsistency between commuters' expectations and management's understanding of their expectations has exacerbated the perception of poor service quality. The rail commuter industry has been plagued by a history of poor service delivery due to inaccessibility, crowding, and poor security as the main reasons for dissatisfaction with railway services. In terms of the unreliability of Metrorail services, research has revealed that trains are rarely on time and tend to stop in the middle of nowhere without notice. This has prompted late arrivals at work and the possibility of job losses for commuters. Moreover, such delays and stoppages lead to train overcrowding and safety risks. As everyone's main goal is get inside that train as soon as it arrives, getting inside could mean shoving, climbing on top of the train, or hanging from doors or windows. The lack of measures to curb such behaviour highlights the fact that commuters are treated with disdain and that nothing is done to reduce overcrowding and the unreliability of Metrorail services.

Moreover, there has been a growing concern about crime becoming a major issue for law-abiding commuters. Both major crimes such as acts of violence, murder or robbery and minor crimes such

as pick-pocketing occur regularly on trains or at stations. Due to ever-changing pattern within the transport sector, crime has succeeded into instilling fear in commuters. As a result, it has become a serious problem in South Africa that does not only have a negative effect on commuters, but on the economy of the country as well.

Public transport networks provide a number of unique settings (places and times) across which crime and disorder can occur. These spaces include train stations and inside trains where there is no security. It was against this background that an extensive literature review was embarked on and individual interviews were conducted with 20 commuters that had been recruited at a selected train station in Durban, KwaZulu-Natal. The prime aim of the study was to explore commuters' perceptions of crime on Metrorail trains. It was anticipated that interviewing commuters who relied on Metrorail services as their main mode of transport would elicit in-depth insight into the issue at hand.

A qualitative study design was employed to collect data by conducting semi-structured interviews. Open-ended questions that allowed the participants to share their experiences openly without being limited in any way were asked in the interview schedule. A thematic analysis process was used to make sense of the data from the various themes that emerged. To understand the criminological phenomenon under study, two significant theories were utilised to underpin this study namely, the routine activities theory and the crime pattern theory.

The findings suggest that a lack of patrol officers on trains and at train stations, as well as the high level of overcrowding on trains, are contributing factors towards the high crime rates in this industry. The data that were collected from the interviews were substantiated by the findings of earlier studies that suggested that, due to affordability, more people were using railway transport currently than in the past. However, as the number of commuters increased, so did crime. The findings further propose that the ineffectiveness of policies and legislations that are in place to curb crime in the railway sector calls for a revitalisation of the purpose to provide safe, secure and reliable Metrorail services to commuters.

## **Contents**

ACKNOWLEDGEMENTS .....	iii
ABSTRACT .....	iv
<b>CHAPTER ONE-INTRODUCTION .....</b>	<b>1</b>
1.1 Introduction .....	1
1.2 Background to and Motivation for Conducting the Study .....	3
1.3 Problem Statement .....	4
1.4 Aim of the Study .....	6
1.5. Study objectives .....	6
1.6 Key research questions.....	7
1.7. The significance of the study .....	8
1.8 Chapter Sequence.....	8
1.9 Conclusion.....	9
<b>CHAPTER TWO : LITERATURE REVIEW.....</b>	<b>10</b>
2.1 Introduction .....	10
2.2. Conceptualization of concepts. ....	11
2.3. The History of the Railway System for Public Transport in South Africa .....	12
2.3.1 Policy framework .....	12
2.3.1.1 National Transport Policy White Paper (1996).....	12
2.3.1.2 <i>Moving South Africa (1998)</i> .....	13
2.3.1.3 National Development Plan (NDP) (2012) .....	13
2.3.2 Transport developmental phases .....	14
2.3.2.1 <i>The Early Development Phase</i> .....	14

2.3.2.2 The development of the SAR&H to SATS .....	15
2.3.2.3 <i>The pre-revitalisation phase</i> .....	16
2.3.3 The South African railway system hierarchy .....	18
2.3.3.1 Department of Transport (DoT) .....	18
2.3.3.2 Passenger Rail Agency of South Africa (PRASA) .....	18
2.3.3.3 <i>The Railway Safety Regulator (RSR)</i> .....	19
2.4 The Link between the Poor and Access to Railway Services .....	20
2.5 The Association between Socio-Economic Status and Rail Transport .....	21
2.5.1. Social issues and railway transport .....	22
2.5.2 Economic issues and railway transport .....	22
2.6 The Impact of Crime on Metrorail Commuters .....	23
2.7 Frequency of Criminal-related Incidents on Trains .....	24
2.8 Commuters' Perceptions of Public Transport Service Delivery .....	25
2.8.1 Passenger's perceptions of crime associated with public transport .....	26
2.8.2 The waiting environment .....	27
2.8.3 The pedestrian environment used by commuters .....	28
2.8.4 Safety and security on trains and platforms .....	28
2.8.5 Lighting .....	29
2.8.6 Availability of security guards or staff.....	30
2.8.7. Commuters' behaviour inside trains .....	30
2.8.7.1 Smoking and delinquency .....	30
2.8.7.2 Sexual crimes in transit .....	31
2.8.7.3 The effect of overcrowding on commuters .....	32
2.8.7.4 Quality of service on trains .....	34
Conclusion.....	36

<b>CHAPTER THREE : THEORETICAL FRAMEWORK .....</b>	<b>37</b>
3.1 Introduction .....	37
3.2 The Routine Activities Theory (RAT) .....	37
3.2.1 Motivated offender .....	39
3.2.2 Suitable target.....	39
3.2.3 Lack of guardianship .....	40
3.3 The Crime Pattern Theory .....	41
3.3.1 Crime generators and crime attractors .....	42
3.3.2 Nodes, paths and edges .....	43
<b>CHAPTER FOUR: METHODOLOGICAL ORIENTATION .....</b>	<b>45</b>
4.1 Introduction .....	45
4.2 Research Methodology.....	45
4.3 Research Paradigm.....	45
4.4 Profile of Durban.....	47
4.5 Sampling.....	49
4.5.1 Procedures followed.....	50
4.5.2 Recruitment strategy used to study participants.....	50
4.6. Data Collection.....	51
4.6.1.Interviews .....	52
4.6.1 Collecting data during level 3 of the Covid-19 lockdown period .....	52
4.6.2 Data analysis .....	53
4.7 Ethical Considerations.....	54
4.7.1 Informed consent.....	54
4.8 Challenges and Limitations of the Study .....	55
4.8.1 Challenges .....	55



4.8.2 Limitations .....	56
4.9 Research quality .....	56
4.9.1 Transferability .....	56
4.9.2 Conformability .....	57
<b>CHAPTER FIVE : DATA ANALYSIS AND DISCUSSION .....</b>	<b>58</b>
5.1 Introduction .....	58
5.2 Reasons for Using Trains as a Mode of Transport.....	58
5.3 Challenges Faced by Commuters Using Trains .....	60
5.4 Safety and security .....	63
5.4.1 Commuters' perceptions of crime on Metrorail trains .....	64
5.4.2 The cause of crimes committed on trains and at stations.....	65
5.4.3 Commuters' suggestions for curbing crime on Metrorail trains and how to improve PRASA's quality of service .....	67
5.5. Conclusion.....	67
<b>CHAPTER SIX : CONCLUSION AND RECOMMENDATIONS .....</b>	<b>68</b>
6.1 Introduction .....	68
6.2 General Conclusions .....	68
6.2.1 Commuters' perceptions of crime on Metrorail trains .....	68
6.2.2 The dangers of overcrowding on Metrorail trains.....	69
6.2.3 The expectations of rail commuters regarding service delivery by PRASA.....	70
6.2.4 Protection on trains and at stations.....	70
6.2.5 Strategies that can be applied to curb overcrowding and crime on trains.....	71
6.3 Recommendations for crime prevention on trains and effective service delivery by PRASA .....	71
6.4 Recommendations for future studies.....	73
6.5 Conclusion.....	73

**REFERENCES..... 75**

**APPENDICES – English and Zulu versions**

Appendix A: Informed consent for participants in English

Appendix B: Interview Schedule for key informants in English

Appendix B: Interview Schedule for key informants in IsiZulu

Appendix C: Informed consent for PRASA

Gatekeepers Letter

Ethical Approval Letter

## **CHAPTER 1-INTRODUCTION**

### **1.1 Introduction**

Railways were constructed by mining companies over a hundred years ago, they were closely associated with modernisation as years passed by. Initially, railways purpose was to provide cheap and reliable transport links directly to ports, but quickly advanced into networks for passengers as well as freight (Rail in Africa, 2015). According to Wilson, Farrington-Darby, Cox, Bye and Hockey (2007), cited in Hutchings (2017:15) “all countries with a rail network of any importance try to achieve the same outcome – that is, to move more people and more goods on time and safely in order to satisfy their customers”. South Africa’s history, that has been marred by apartheid, had a negative impact on the rail industry , even after democracy, the rail industry had to wait a couple of years to enjoy the same freedom rendered to other sectors in terms of safety and security matters and provision (Wilson et al,2007 ). “The railway network in South Africa started in 1860, and for about 38 years prior to 1981, South Africa did not invest in its railway system” (Hunchings, 2017:18).

Apart from the difficulties that were faced by railway services in South Africa regardless of extensive investments, railway systems in Africa is still beneficial to the country’s economic and social development. There are numerous traits that make railways different from other modes of transport. For instance, rail is cost-effective and return trips are usually cheap. Furthermore, passengers can be transported in large numbers and this form of transport “is energy efficient, it is land saving, has high safety levels, and is environmentally friendly” (Saputra, 2010:2). Conversely, these advantages are counteracted by crime, overcrowding, and dissatisfaction with the quality of service that is supplied. In this regard, Page and Moeketsi (2000:1) state:

“The prevalence of crime in South Africa has had a negative impact not only on national economic growth, investor confidence and tourism, but also on the safety and security of its citizens and residents. Sad testimony to this, is the fact that the incidence of criminal activity has permeated into all facets of society, including public transportation”.

According to Hutchings (2017:1), “the benefits of rail include creating economic growth, reducing congestion on roads, providing mobility to citizens, and contributing to re-industrialization”. However, for train transport to be of importance in society, safety must be ensured at all times. Research has shown that a safe journey by train instils confidence in the community, passengers as well as investors, and this in return increases the country’s economic growth (Hutchings, 2017:1). However, “the upward trend of accidents in South Africa is of concern due to the implications for improving safety” (Hutchings, 2017:3). Some human activities towards railway services, such as vandalism, setting trains on fire, collisions, level crossing accidents and theft, cost South African economy a fortune in the region of R9 million in the 2015/2016 financial year (Rail Safety Regulator, 2002). Such unnecessary expenditure has a negative effect on the economy and on commuters.

The White Paper on National Transport Policy (1996) ensures on providing safe, reliable, effective, and efficient and a fully integrated transport operations and infrastructure which will best meet the needs of freight and passenger customers. It also aims to improve levels of service and be more cost-effective in line with the government’s strategies for economic and social development “whilst being environmentally and economically sustainable”. However, the safety of commuters is persistently at risk and many become victims or witnesses of crime as they board or disembark from trains (Page & Moeketsi, 2000).

The inability to curb crime in Metrorail trains has triggered questions about the effectiveness of policies to curb this form of crime. For example, a survey was conducted among commuters at the Berea Road/Warwick Junction Modal Interchange. Commuters were asked which organization/agency they thought should be responsible for their safety and security on public transport (Page & Moeketsi, 2000). The commuters felt that the South African Police Service (SAPS) should be the primary agent responsible for their security on trains, whereas some rail commuters indicated that private security guards should play a more prominent role. These two agencies were therefore considered important in ensuring crime prevention on trains and at railway stations (Page & Moeketsi, 2000).

## **1.2 Background to and Motivation for Conducting the Study**

It is now more than twenty years since the emergence of democracy in South African and the time when the democratic government aimed to improve the railway sector. Various policies were drafted such as the White Paper on National Transport Policy of 1996 that asserted the importance of railway services for both freight and passenger transport. This policy “was a point of departure for any discussion on national land transport” (DoT, 2015:13). The vision behind this policy was “to provide safe, effective, efficient, and fully integrated transport operations and infrastructure, which will best meet the needs of freight and passenger customers” (Ibid.). To augment this policy, the National Railway Safety Regulator Act No. 16 of 2002 (RSR, 2002) provides for the establishment of a Railway Safety Regulator (RSR) as well as safety standards and regulatory practice for the protection of persons, property and the environment (DoT, 2015). The Nation Rail Policy Green Paper (DoT, 2015:1) also aimed at the “revitalisation of rail in South Africa through the implementation of strategically focused investment-led policy interventions which will reposition both passenger and freight rail for inherent competitiveness by exploiting rail’s genetic technologies to increase axle load, speed, and train length”. In a nutshell, these policies and legislations were developed to improve rail service delivery for passengers, including quality efficiency and the capacity of trains (DoT, 2015).

However, many incidences have been reported that suggest that, despite legislations and policies, rail services are still plagued by criminal activities and that commuters’ right to safety and security continue to be violated. “The 2014 Gauteng Province Household Travel Survey found that train passengers were generally frustrated with railway services. The survey listed unavailability, overcrowding, lack of punctuality, unreliability of services, limited geographical coverage, and erratic frequencies of services as key limitations” (Heyns & Luke, 2018:417). Passengers become victims of robbery, pick-pocketing and assault. Moreover, a lack of sufficient lighting inside waiting room in the early hours (5:00 am) as well as at late hours (19:00pm) motivates offenders to assault vulnerable targets in the absence of a capable guardian at different time during the day or night.

In support of the above statement, “...progress and development in the South African rail industry has [sic] not kept up with the demand. The maintenance of railways lines are [sic] also a challenge [and] service delivery is below expectations which has contributed to the business community preferring road transport to rail because of the need for flexibility and on-time deliveries” (Borrvalho ,2013:50). Similarly, Heyns and Luke (2018:9) express that “it is clear that the Metrorail service quality is not adequate to meet the needs of commuters, much less entice them to swap from other forms of transport”. Studies of commuters’ perceptions of crime on trains as well as their experiences have exposed a gap between what they perceive as good quality service versus the poor quality of service they are receiving. The challenges experienced by rail commuters which, from time to time, have contributed towards serious criminal activities attest to the fact that “service quality in the public transport sector remains an elusive and a much neglected area of study” (Govender, 2014:318).

Therefore, this study posits that it is of high significance that the needs and expectations of commuters are understood so that service expectations can be met. The study further argues that commuters’ opinions should be valued and taken into considerations as they are the first point of contact between public transport management and policy directives. In this context, it was deemed imperative to interact with commuters on a personal level to determine what perceptions, experiences and recommendations they could offer to improve service delivery and curb crime in the railway sector. Hamid, Tan, Zali, Rohamat, and Aziz (2015:1498) define perceptions as “the act of perceiving or apprehending by means of the sense or of the mind, cognition and also understanding”.

### **1.3 Problem Statement**

Despite the developments proposed by the White Paper (DoT, 2017) and the Rail Safety Regulator corporate plans of 2002, the correlation between Metrorail trains and crime is a serious challenge. In fact, the Metrorail service in Durban is in a state that can only be described as dire. Metrorail trains have been considered a fertile ground for crime due to numerous factors such as a lack of patrolling officers and security on trains, a lack of adequate lighting on trains and at stations, and limited staff on duty during peak hours. In Durban, commuters are exposed to unreliable, unsafe

and often inaccessible train services. Trains do not arrive on time or, if they arrive at all due to delays and cancellations, people are crammed into carriages and this results in overcrowding and discomfort. Train schedules are often and suddenly cancelled while commuters are already at the station waiting for transport. Moreover, due to taxi and road congestions, an increasing number of people need to make use of train transport, but the unreliability of the system is a headache for commuters.

Various criminal incidents have occurred on trains and at stations over the years. For instance, during the 2015/2016 financial year, 5 520 security related incidents associated with the railways were reported (Madzivhandila, 2019). In Cape Town, a security guard was shot and killed by robbers who were carrying guns, then they shot a train driver twice in his head for his bag (Herman, 2016). In July 2019, two thieves stole an empty train from a depot and took it on a 12 km ‘joy ride’ from eMkhomazi to Umgababa on the KZN south coast ( Magubane , 2019, Thieves ‘hijack’ empty KZN train and take 12km joy ride) . In essence, this picture of crime shows that criminals are no longer targeting commuters only but also endanger staff. News articles abound of passengers who were not happy with the service that they received and then expressed their frustrations by taking it out on innocent commuters who merely wanted to work and take care of their families.

Incidents of crimes directed at commuters have also been reported. Simelane and Nicolson (2015, cited in Madzivhandila, 2019:16) reported the following incident that occurred in Johannesburg:

“Four men moved into the carriage, pulled out guns, and demanded that everyone put their phones and money on the floor. At one stage, one commuter drew his own gun and shots were exchanged, leaving one person dead and two injured, before the criminals fled the scene.”

Violence has become an everyday occurrence on trains. For instance, between Lynedoch and Eerste River outside Cape Town, in the evening of Friday 7 September 2018, “a man was killed during a horrific attack on commuters who were travelling on the train” (Kempen, 2018:24). Another incident occurred in the Western Cape when a commuter, who was a final year

engineering student, was travelling by train during the peak hour period one evening. The victim, who lost his life, was a passenger in the first-class corridor travelling back to where he resided, when he was unexpectedly attacked by an unknown offender who stabbed him to death (Van Heerden, 2003). Many such incidents occurred during off-peak hours when there was no security staff and only a few commuters on trains (Madzivhandila, 2019). The exposure of innocent commuters to such horrific crimes makes the researcher question the effectiveness of existing security measures as well as the implementation of policies that should ensure the safety of commuters and offer them reliable and comfortable journeys to their places of work and back.

#### **1.4 Aim of the Study**

The purpose of this study was to explore train passengers' perceptions of crime on Metrorail trains. The focus shifted from studying developed countries to a study of conditions in a developing country and the subjects were Metrorail commuters.

#### **1.5. Study objectives**

Emerged objectives from the aim of the study were as presented below:

1. To explore train commuters' perceptions of crime on Metrorail trains. This objective served to uncover crimes that occurred in trains. Serious crimes would be those that resulted in death or injury whereas minor or lesser crimes would be those that resulted in stress. The nature of the crimes associated with railway commuters was therefore identified by the different types of crime that were perpetrated at different times in Metrorail trains. Addressing this objective would reveal the causes of crime in trains.
2. To determine the dangers of overcrowding on Metrorail trains. When more people move away from taxi and bus transport to trains because of the affordability of the latter mode of transport results to overcrowding. The purpose of this objective was to explore factors such as delays and cancellation of trains resulting in shoving and pushing as commuters vie to board a train. Congested and noisy environments are created that discomfort most



commuters, whereas delinquents view this as an opportunity to commit minor crimes such as pick-pocketing.

3. To determine rail commuters' expectations of service quality. This would be learnt by analysing commuters' perceptions of service delivery versus customer satisfaction. The importance of this objective was to identify aspects that require intervention should there be a gap between the services provided by PRASA and commuters' expectations.
4. To explore the role of security staff on trains and at stations. A safe journey is experienced by commuters when they travel safely without fear of exposure to criminality. Their safety should be ensured by security guards who patrol passages and carriages inside trains as well as the premises in and around stations. An absence of security guards motivates criminal behaviour, whereas the presence of security guards creates a sense of security. The importance of addressing this objective is to ensure commuters safety and security, this can only be ensured if security guards understand their role and they are staffed to patrol inside trains and stations as long as trains are still operating, irrespective of the time. Addressing this objective would reveal if security guards are of any importance in trains and stations and the researcher would be able to identify aspects that calls for intervention within the safety and security department depending on participants responses.
5. To examine the effectiveness of measures implemented to curb overcrowding and crime on Metrorail trains. The importance of this objective was to determine the effectiveness of the hierarchy of the South African rail system in preventing crime in transit.

## **1.6 Key research questions**

- What are commuters' perceptions of the prevalence of crime on Metrorail trains?
- What are the dangers of overcrowding on Metrorail trains?
- What are the expectations of rail commuters in terms of the quality of the services delivered PRASA?

- What is the role of security staff on trains and at stations?
- Are the measures that are implemented to curb overcrowding and crime on trains effective?

## **1.7 The significance of the study**

The significance of this study will be related to the contribution it will offer to train commuters PRASA management, Department of transport and Academia. As the study addresses commuter's perceptions of crime in Metrorail trains, this study will be a voice of participants. PRASA management will get to understand commuter's everyday concerns when using this mode of transport. On the other hand, PRASA management will be exposed in knowing area they need to improve on so that such problems mentioned by commuters do not persist. Furthermore, through Department of Transport working with PRASA, negative areas identified by commuters which later on affects the country's economy as the number of people who are interested in using trains decreases. The study would benefit the Department of Transport in revisiting acts and legislations and ensuring that people receive services promised. Lastly, the study will add to the stock of scholarly knowledge in terms of crime in public transit and crime, limitations identified by the researcher would help future academia's who want to engage in the same study what was covered by this study and what was not covered.

## **1.8 Chapter Sequence**

**Chapter 1: Introduction.** Summary of the entire study is given in this by introducing the aims and objectives, motivation for the study, background to the study, and the main research questions.

**Chapter 2: Literature review.** This chapter provides a review of public rail transport and crime. To understand public transit and crime, the researcher considers the findings and recommendations of previous studies that were conducted both nationally and internationally.

**Chapter 3: Theoretical framework.** Two theories are reviewed in this study to relate to the topic under studied. Each theory is explained and linked to the study.

**Chapter 4: Research Methodology.** This chapter presents steps on data collection as well as the outcome. The findings are associated with the theory of planned behaviour and the routine activities theory.

**Chapter 5: Analysis and discussion.** This chapter presents data, analysed and discussed according to points that emerged from the data. To ensure validity, the findings are related to the theoretical framework as well as the literature that was reviewed.

**Chapter 6: Conclusion and Recommendations.** For the purpose of achieving the aim of this study, intellectuals explains how objectives were met. To conclude, various recommendations that emerged from the findings are presented.

## **1.9 Conclusion**

The point of contact in efforts to understand the challenges experienced by commuters using Metrorail trains is commuters themselves. The discourse was introduced and segmented under the aim, background and objectives of this study. A summary of chapters was provided to structure the thesis presentation and to guide the reader to follow the meaningful and logical progression of the study thesis. A more exhaustive discussion is offered in each chapter of what was highlighted.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

Before one addresses an issue regarding research study that one wishes to conduct it is importance to find out what others have already learned about an issue, understanding what other scholar explored (Neuman, 2011). This was achieved through an extensive review of previous studies conducted both nationwide and global (Neuman, 2011). Boote and Beile (2005) assert that, “before one conducts research, one must gain understanding of what has been done before, what the strengths and weaknesses of other existing studies were, and what these strengths and weaknesses might mean to be able to take it from there” (Boote and Beile 2005:7). According to Neuman (2011:124), “a literature review builds on the idea that knowledge accumulates and that one can learn from and build on what others have done”. “Not knowing or understanding what has been done before puts any researcher at a great disadvantage, and therefore the literature review is generally aimed at gaining detailed knowledge of the topic being studied” (Ngubane, 2016:13). In this context, the main concepts and findings elicited by the literature review informed the purpose of this study.

Both primary and secondary sources were consulted during the literature review phase of this study. The researcher thus considered studies that had been conducted by other researchers as well as relevant books and study material. The overarching aim of this study was to explore Metrorail passengers’ perceptions of crime-in-transit. To inform this investigation from a historical perspective, developments in railway transport for public purposes will be discussed. Policy frameworks that have been developed throughout the years are also taken under the loop. Further to that, the fears as well as challenges that train commuters encountered over a period of time will be outlined. Finally, an overview of the policy frameworks that have been developed throughout the years for the purpose of ensuring a safe, reliable and comfortable railway system will be evaluated.

## **2.2. Conceptualization of concepts.**

This study involves the extensive use of terms such as commuters, passengers, public transport trains, stations, vandalism and crime against person. Passenger and commuters are used interchangeably, it is therefore logical to start by defining these terms as well as stating their significance in the study.

### **2.2.1. Commuter.**

Commuter is defined as someone who leaves his/ her home to go to work, including students and trainees (Sposato, Röderer and Cervinka ,2012) .

### **2.2.2. Public transport**

Public transport, public transportation, public transit, and mass transit are all terms which are used in transport studies, and they all refer to transport systems in which the commuters do not travel in their own vehicles (International Association of Public Transport, 2011).

### **2.2.3. Rapid transit (train)**

A rapid transit, metro or elevated railway system is defined as an electric passenger railway in an urban area with high capacity and frequency, and which is grade separated from other traffic (Wright, 2003). It is responsible for transporting commuters from and to their place of origin.

### **2.2.4. Station**

“A facility for passengers to enter or leave a train, including a railway passenger terminal and a passenger halt and may include facilities for passenger modal transfer and commercial activities forming part of the station and also includes any other place that may be prescribed, but excludes that part of the network running through the station” (Department of Transport, 2015:3).

### **2.2.5. Vandalism**

According to the Railway Safety and Standard Board (RSSB) vandalism refers to “Obstructions placed on the line, trains striking obstructions, stone throwing, arson, graffiti and damage of equipment and property”(RSSB,2006:6).

#### 2.2.6. Crime against persons

This includes crimes such as robbery, sexual offences, murder, attempted murder and assaults on passengers (RSSB, 2006)

### **2.3. The History of the Railway System for Public Transport in South Africa**

According to Heyns and Luke (2013:1), “public transport policy in South Africa is described by a number of documents, mainly the White Paper on National Transport Policy (1996), Department of Transport (1998) and, more recently, the National Development Plan (2012)”. It was important to peruse these policy documents as they provided the basis on which this study was constructed. For many years the South African government has developed policies and strategies to improve and promote public transport (Heyns & Luke, 2013). However, very little has changed over the last 30 years in the railways sphere, although projects such as the Gautrain high-speed rail service and a few rapid bus transit routes have been introduced (Heyns & Luke, 2013). The researcher acknowledges that it is not always possible to align policies and legislations with public requirements or that policies succeed when implemented (Heyns & Luke, 2013). Therefore, a comparison of government’s intentions through the establishment of policies with public opinion on transport issues would determine the success or failure of these policies. Failure is exposed if a disconnection between the policy objectives and public opinion is discovered (Heyns & Luke, 2013).

#### **2.3.1 Policy framework**

##### **2.3.1.1 National Transport Policy White Paper (1996)**

The vision for transport in South Africa is embedded in a policy document titled *National Transport Policy White Paper of 1996* (hereafter referred to as the White Paper) (Makaepea, 2017). The White Paper expounds the vision for South African transport as follows: “To provide safe, effective, efficient, and fully integrated transport operations and infrastructure, which will best meet the needs of freight and passenger customers” (DoT, 2015:7). According to the White Paper (DoT, 1996:7):

“The role of the DoT is to focus on policy and strategy formulation which are [sic] its prime role, and substantive regulation which is its responsibility, with a reduced direct involvement in operations and in the provision of infrastructure and services, to allow for a more competitive environment.”

### **2.3.1.2 Moving South Africa (1998)**

Luke and Heyns (2013) explains that “The Moving South Africa project (MSA) was designed to produce a data-driven program for strategic action that extends the short to medium-term policy formulation documented in the Transport White Paper into a long-term strategic formulation embodying the sets of trade-offs and choices necessary to realize the vision as set out in the White Paper (Department of Transport 1998)”. This document aimed at supporting the whole vision by “providing an effective and sustainable urban transport system, planned and regulated through the lowest possible level of government, based on competition and largely private sector operation, which reduces system costs and improves customer service in order to meet customer and national objectives for user cost, travel times, choice, and safety.” (Luke and Heyns, 2013:2).

### **2.3.1.3 National Development Plan (NDP) (2012)**

The National Development Plan was presented by the National Planning Commission (NPC) in August 2012. This Plan aims at addressing social issues such as eliminating poverty and lower inequality in South Africa (Heyns & Luke, 2013). Heyns and Luke (2013:3) outline that “Investments in transport infrastructure and improving public transport are viewed as key development areas that are imperative in achieving the 2030 objectives. The NDP recognises specific strategy objectives [that] are related to public transport and are intended to attack poverty”. According to the National Planning Commission (2012), the strategy objectives that should be achieved by the NDP are the following:

- Investments in the transport sector must “bridge geographical distances affordably, foster reliability and safety so that all South Africans can access previously inaccessible economic opportunities, social spaces and services” (p. 183).

- “Investments in public transport ... will benefit low-income households by facilitating mobility” (p. 18).
- “Improving mobility and economic accessibility will increase social and economic access and alleviate poverty. The provision of safe and efficient public transport is critical to this end” (p. 184).

This document thus “highlights the need to invest in transport infrastructure and improve public transport” (Luke & Heyns, 2013:7).

### **2.3.2 Transport developmental phases**

“The Department of Transport (DoT) states that the history of rail transport goes back to when the South African rail transport sector experienced mixed fortunes from its inauguration in 1860 until the present day” (DoT, 2015:5). “The events that have marked South Africa’s history have impacted significantly on the development of the rail sector and, together with other external factors, have resulted in a railway industry that now faces several major challenges (DoT, 2015:5)”. The history of rail is “divided into the Early Development Phase, the South African Railways & Harbours (SAR&H) Phase, and the present Pre-Revitalisation Phase” (DoT, 2015:6).

#### **2.3.2.1 The Early Development Phase**

The development of public steam railway and its inauguration across the world followed a particular sequence. “It is remarkable that in 1860, a small town like Durban had the distinction of operating the first public steam railway in Africa, in the 1870s, government took over private railways to serve the long-term developmental needs perceived at the time” (DoT, 2015:6). “Until 1910, rail transport in South Africa was used predominantly in the interest of the military and for the transportation of agricultural and mining traffic” (DoT, 2015:6). “It was planned and developed to benefit the colonial power’s interest, hence operations were mainly focused on moving soldiers and military supplies and conveying farm produce and minerals” (DoT, 2015:6). It has thus been argued that “railway services did not recognise the long-term developmental needs of the colonies



or their people” (DoT, 2015:6). These historical effects have raised concerns whereby revitalising initiatives is contemplated (DoT, 2015).

### **2.3.2.2 The development of the SAR&H to SATS**

Subsequently, “ South African Act of 1909 nationalised certain transport services and established the South African Railways & Harbours (SAR&H) in 1910” ( DoT, 2015:6). This was after the country had become the Union of South Africa, “As a result, all properties such as railways and harbours which had belonged to the former Colonies became vested in the Governor-General in Council, a grouping that has endured mutatis mutandis until the present” (DoT, 2015:6).

“South African Transport Services Act No. 65 of 1981 (known as the SATS Act) then replaced the SAR&H legislative dispensation, changing the name SAR&H to South African Transport Services (SATS) ( DoT, 2015:7)”. Particularly, “SATS was empowered to control, manage, maintain and utilise certain transport services throughout the Republic” (DoT, 2015:7). Importantly, “It was stipulated that SATS would be administered on business principles with due regard to the economic interests and total transport needs of the Republic. The strategic focus had moved from the development of agriculture and industry by way of cheap transport services, to the economic interests and total transport needs of the country” (DoT, 2015:7).

Later, “Legal Succession Act to the South African Transport Services Act No. 9 of 1989 replaced the SATS dispensation” (DoT, 2015:7). Thereafter, “the Legal Succession Act established a public company known as Transnet Limited in 1990, as well as the South African Rail Commuter Corporation Limited (DoT, 2015:8)”. In terms of this 1989 Act, “the rights of the state as member and shareholder of the company resides with the Minister of Public Enterprises, while those of the Corporation lie with the Minister of Transport”. As above mentioned, “Transnet then emerged in the year of 1990 as a fully state-owned entity responsible, among others, for freight and long distance passenger rail services through its Spoornet division, and long distance passenger and road freight services through its Auto net division, while the South African Rail Commuter Corporation (SARCC) was established in April 1990 to take responsibility for commuter rail services” (DoT, 2015:8).

### ***2.3.2.3 The pre-revitalisation phase***

Regarding passenger rail, during the pre-revitalisation phase old and inadequately maintained assets that undermined efforts to develop the railways sector were addressed. After many years of overloading and under-maintaining, the condition of commuter rolling stock “...had deteriorated to crisis levels and it was unable to satisfy passenger demands” (DoT, 2015:8). “After some time, the Department of Transport indicated that ...stakeholders realised that transit was unable to satisfy passenger demands [and that] the network infrastructure was not able to meet the demands of a rapidly changing society” (DoT, 2015:22). Thus, “to consolidate passenger rail (i.e., Metrorail and Shosholoza Meyile), the Passenger Rail Agency of South Africa (PRASA) was established in 2009 to position and promote rail as the preferred travel mode in high-density, high-volume corridors where it would be competitive by virtue of its only inherent strength, namely high capacity” (PRASA, 2015:8).

Two important positive steps were taken in this phase, namely the Railway Safety Regulator Act in 2002, and the Gautrain Rapid Rail Link (DoT, 2015). The Rapid Rail Link is “a public-private partnership in terms of a concession agreement between the Gauteng Provincial Government and the Bombela Concession Company” (DoT, 2015:8). Gautrain opened for service in May 2010, just prior to the FIFA Soccer World Cup.

In summary, as a consequence of the three phases of development discussed above, “the rail sector is currently divided into various entities, namely the Passenger Rail Agency of South Africa (PRASA), Transnet Freight Rail (TFR), and Bombela Concession Company (Gautrain)” (Madzivhandila, 2019:1).

PRASA is again divided into three divisions, namely PRASA Tech, PRASA Rail and PRASA Cress.

- **PRASA Rail**

According to Madzivhandila (2019:2), “PRASA Rail consists of the Metrorail division that transports commuters locally”. It also has a mainline passenger service that operates long distance. Examples of local commuter systems are Stanger, Umlazi, KwaMashu and the

South Coast line whereas long distance lines are in Johannesburg where commuters use the Shoholoza Mayle. Metrorail remains the most affordable mode of transport for commuters. According to the PRASA Corporate Plan (2016:48 cited in Madzivhandila, 2019:2), “it is highlighted that commuter’s pay about R3 per single trip of up to 7 km, with over 516 million passenger journeys per annum and transport the majority of poor South Africans dependent on inexpensive public transport”. PRASA’s mandate is to make sure that a safe and reliable commuter service is provided at all times (PRASA, 2016).

- **PRASA Tech**

Transnet Freight Rail (TFR) is the second division of PRASA that operates in the railway sphere (Madzivhandila, 2019). The Department of Public Enterprise (2014, cited in Madzivhandila:5) indicates that “Transnet is the biggest and most important part of the cargo logistics chain that transports goods every day, everywhere in South Africa, by means of its pipelines and to and from its ports”. It is regarded as the “ leading freight logistics company in South Africa that enables effective growth and development of the South African economy by providing reliable cargo transportation and handling services that fulfil clients’ needs” (Madzivhandila, 2019:5).

- **PRASA Crest**

Gautrain is the third mode of transport in the railway system (Madzivhandila, 2019). “It was launched in 2010 as a result of traffic congestion between the two big cities of Johannesburg and Pretoria” (Madzivhandila, 2019:6). Gautrain is a mass rapid-transit railway system that “transports about 52 000 people every day, including weekends, or 1.2 million people per year” (Madzivhandila, 2019:6). It alleviates the heavy traffic problem in and around both cities (Madzivhandila, 2019). “The Gautrain has also served as an accessible alternative to other public transport options for local commuters and tourists. It was introduced as the first train that ran in 2010 during the soccer World Cup that was hosted by South Africa (Madzivhandila, 2019:6)”.

### **2.3.3 The South African railway system hierarchy**

Hutchings (2017:19) states: “Within socio-technical systems there are a number of hierarchies, each with [its] own roles, responsibilities, goals and constraints”. These structures consist of the “Government, represented by the DoT, the Regulator, represented by the RSR, and the Operators, of which there are over a hundred. These hierarchical structures in the South African railway system are important to determine effectiveness in preventing crime in transit” (Hutchings, 2017:16). For the purpose of this study, the operators that are discussed in this section are as follows: The Department of Transport (DoT), the Passenger Rail Agency of South Africa (PRASA), and the Railway Safety Regulator (RSR).

#### **2.3.3.1 Department of Transport (DoT)**

According to the DoT (2012, cited in Huntchings, 2017:20), “is responsible for the regulation of transportation namely road, rail, maritime and air”. The DoT’s responsibilities in the rail sector include “...rail economic and safety regulation through standards, infrastructure development strategies and systems that reduce system costs and improve customer service” (Huntchings, 2017:20).

#### **2.3.3.2 Passenger Rail Agency of South Africa (PRASA)**

Huntchings (2017:25) explains that “PRASA is a national government business enterprise that reports to the Minister of Transport and is owned by the South African government in its entirety”. PRASA is the one public transport operator responsible for rail across South Africa (PRASA, 2012). Metrorail transports about 2.2 million commuters daily across South Africa, which shows that numerous people rely on trains for transport (PRASA, 2012). Huntchings (2017) conducted a study on systemic factors to investigate railway occurrences, and emphasises that PRASA’s strategy is “to become a modern public entity that is able to deliver quality passenger services by 2018” (Huntchings, 2017:25). However, Heyns and Luke (2018) asked the question: “*Is the quality of passenger service in South Africa improving?*” and concluded that service quality was not getting any better as commuters persistently complained about the challenges that they experienced as a result of an unsatisfactory service.

PRASA as a railway agency should uphold values that ensure the safety and comfort of commuters and staff members. “Service excellence as a first value, implies to providing the kind of service that ensures our customers leave with a smile, whereas safety as a second value refers to ensuring that our customers and colleagues enjoy their journey and arrive safely and refreshed” (PRASA, 2015:4). Communication as a third value is explained as “sharing information with our customers and colleagues in an open and honest way” (PRASA, 2015:7). In essence, the current study aimed to determine if these values were indeed upheld by PRASA, with particular attention to its Metrorail service provisions in the Durban area.

PRASA and RSR are the biggest operators of rail in South Africa and work hand in hand, but their operations have reportedly been fraught with problems. The researcher shares Huntchings’s view that the conflict of interest between PRASA and RSR impacts service delivery negatively. For example, doors on trains are damaged and some cannot be closed even when the train is in motion, and broken windows have caused various injuries and accidents (Huntchings, 2017). Moreover, PRASA has its own operating instructions in terms of safety requirements that the RSR should be able to enforce, but allowing trains to run with open doors and broken windows is contrary to PRASA's own operating instructions (Nolan, 2016). These problems persist and it is disconcerting that issues like these are not addressed (Huntchings, 2017). This also questions the intentions of the government, PRASA and the RSR and their ability to implement policy. The researcher shares Huntchings’s (2017:27) concerns when he asks: “If the government is serious about public transport safety, why are these trains allowed to depart in such an unsafe condition?”

#### ***2.3.3.3 The Railway Safety Regulator (RSR)***

Hutchings (2017:37) argues that the National Railway Safety Regulator Act No. 16. Of 2002 (South Africa, 2009) provides for the establishment of a national regulatory framework for South Africa, hence the RSR was established. The RSR’s legislative mandate is to enforce safety performance of all railway operators in South Africa and to provide safety standards and regulatory practices for the protection of persons, property and the environment (RSR, 2002). According to this Act, the mandate of the RSR can be summarised as follows:

- To oversee safety of railway transport, whereas operators remain responsible for managing the safety of their operations;
- To develop regulations and standards in order to establish and enforce a regulatory regime;
- To promote the harmonisation of the railway safety regime of South Africa within Southern African Development Community (SADC) railway operations;
- “To conclude appropriate cooperative agreements or other arrangements with organs of state to ensure effective management and overseeing of safe railway operations (RSR, 2002, cited in Madzivhandila: 89)”.

With reference to the literature, passengers’ perceptions of crime in transit and their concerns about unsafe conditions and lack of security suggest that the visions of rail operators and the state have not been met as mandated by Act 16. The aim of this research was therefore to investigate commuters’ perceptions of the efficacy of the RSR and PRASA, to determine if and why these organs have failed to meet their respective mandates, and to establish what might be done to place the railway system of South Africa ‘back on track’.

## **2.4 The Link between the Poor and Access to Railway Services**

“Public transport makes an important contribution to the lives of the poor as it provides them with the means to access employment, income-generation opportunities, and education” (Sohail, & Maunder & Cavilli, 2006:26). The problem faced by the poor is that they often live far from centres of employment, consequently long travelling distance and paying a lot of money on transport affect poor commuters (Maunganidze, 2011). Some even rent rooms in city areas just to get close to where they work and to pay less for transport. Those that travel long distances incur heavy costs and time even before they enter their place of employment or school (Maunganidze, 2011). The frustration is often exacerbated when trains arrive late, are congested, and even cancelled. Wasteful hours are often spent just waiting for a train to arrive. The Integrated Transport Plan (ITP, 2010) acknowledges that poor communities and a large segment of the workforce are entirely dependent on public transport. In other words, these people’s modal choice mainly relies

on public transport and they are the ones who are worst affected when public transport is lacking or unreliable (ITP, 2010).

## **2.5 The Association between Socio-Economic Status and Rail Transport**

Vilakazi (2013:21) states that “it is important to discuss the importance of public transport because it claims a significant portion of, and is a substantial contributor to, the country’s Gross Domestic Product (GDP)”. Venables, Laird, and Overmoon (2014) explain that the reason for exploring the effect of public transport on the socio-economic status of South Africa is because the transport sector is an important component of the economy and a commonly used tool for development. Cromhout (2016:727) highlights that urban populations are growing in South Africa and that “...predictions states [sic] that more than 85% of the South African population will be living in urban areas come 2050”. As the number of people moving to urban areas increases this is a result of rural people moving around looking for a better life. They seek employment opportunities but transport costs often restrict their movements (Cromhout, 2016). Therefore, as more and more people are migrating to urban areas, the population here is increasing which means that there is a correlation between poor socio-economic conditions, particularly in urban areas, and public transport (Cromhout, 2016).

“Rail transport, which is *typically* a good solution for moving large numbers of people in urban areas, is known to be problematic in terms of service quality in South Africa” (Heyns & Luke, 2018:472). When the service quality of a certain mode of transport meets commuters’ needs, there is a high possibility that the number of commuters using that mode of transport will increase. However, if passengers are not happy with the quality of service they are rendered, than there is high possibility that the number of commuters using that certain mode of transport will decline (Heyns & Luke, 2018). Moreover, if crime is rife in the rail transport sphere, there will undoubtedly be a spin-off as levels of patronage will decline (Cozens, Neale, Hillier, & Whitaker, 2004). In the long run, the problem of dissatisfactory service quality has a negative impact on the economy.

### **2.5.1. Social issues and railway transport**

Using trains to commute unite different people from different communities and encourages neighbourhood interaction (Vilakazi, 2013). As commuters interact with one another, friendships are formed and information is shared which can either be educational or employment related. For this reason, “public transport encourages, amongst others, social activities and helps create strong neighbourhood centres that are economically stable, safe and productive” (Vilakazi, 2013:22). However, it is a sad reality that potential offenders with criminal intent also utilise this mode of transport and their nefarious activities are exacerbated by a lack of security on trains and in and around stations (Page & Moeketsi, 2000).

### **2.5.2 Economic issues and railway transport**

According to Sagi (2013 cited in Vilakazi, 2013:21) “public transport is a catalyst for economic growth and direct and indirect job creation in South Africa. The provision of affordable, safe and reliable transportation of people is critical to the development of the country”. Vilakazi (2013:22) further asserts that “public transport creates and sustains employment and this is good for both workers and companies, as it connects workers to jobs in both suburban and rural areas ... it reduces congestion and travel time and protects mobility”. Furthermore, “it enhances personal economic opportunities and saves individuals money in the sense that passenger transportation use lowers household expenses and frees up more income for other needs” (Vilakazi, 2013:22).

Vilakazi (2013:23) also asserts that public transport “is essential to the functioning of the economy and is inextricably linked to trade, economic growth and development”. A drop in the number commuters using a specific mode of transport such as trains results in a drop in the economy. Thus, if commuters are too scared to use trains, the effect of their absence will impact the economy. Rodrigue and Notteboom (2014, cited in Dos Santos Rocha, 2014:13) elaborate on this point as follows:

“The economic impacts of transportation can be direct or indirect; they are direct when accessibility enables employment, contributes towards growth of markets, and saves time



and costs, thereby adding value to the economy. They are indirect when prices of commodities, goods or services drop as a result of efficient transportation.”

Both passenger and freight rail services are important in the country’s economy and development. Development (DoT, 2015). Currently, “the South African mining industry in particular relies heavily on rail freight services to move raw materials from pits to ports for export” (DoT, 2015:29). “These exports can generate significant revenue for the country and provide associated jobs, thereby contributing to the economy as a whole” (DoT, 2015:29). By importing and exporting goods, international partnerships are formed and relationships with other countries are established that result in growth of the country’s economy as well as social development.

## **2.6 The Impact of Crime on Metrorail Commuters**

Commuters, including PRASA staff who also use trains as a mode of transit when they are going to work, have the right to basic need such as safety and security (Madzivhandila, 2019). However, there is evidence that this is not the case. Commuters have been upset with train drivers and staff for poor service delivery by PRASA. Train delays and cancellations have even resulted in violent protests and vandalism (Madzivhandila, 2019). Train drivers have found themselves caught in the middle of a war between commuters and PRASA and some even lost their lives (Madzivhandila, 2019). For instance, Kruger (2018:np, cited in Madzivhandila, 2019:17), reports“...on 14 March 2018 a female train driver was hit on the head by a brick, stripped of her clothing, and dragged to a nearby bush. Her attackers were interrupted by a PRASA response team”. This occurred along Pretoria to Pienaarspoort corridor when there were attacks on trains (Madzivhandila, 2019). In another incident (Herman, 2016), a security guard was shot and killed by two armed robbers, then shot a train driver twice in his head for his bag.

Commuters have also been targeted. Simelane and Nicolson (2015, cited in Madzivhandila 2019: 16) report that, “In Johannesburg, four men entered a carriage, pulled out guns, and demanded that everyone put their phones and money on the floor. Another commuter drew his own gun and shots were fired leaving one person dead and two injured, before the criminals fled the scene”. Violence has become an everyday phenomenon on trains. In another incident between Lynedoch and Eerste River outside Cape Town, a man was killed during a horrific attack on commuters who were

travelling on the train. This incident happened in the evening of Friday, 7 September 2018 (Kempen, 2018:24). In another incident in the Western Cape, a final year engineering student lost his life when an unknown offender stabbed him to death (Van Heerden, 2003).

What is disturbing is that incidents of violence occurred at any time, but particularly when no security staff was on duty and when there were a few commuters on the train (Madzivhandila, 2019). These events demonstrate that criminals now target both commuters and PRASA staff and that passengers express their frustration by attacking the innocent. It was therefore deemed important to investigate who was really responsible for such acts of crime: commuters or the agency?

## 2.7 Frequency of Criminal-related Incidents on Trains

The Rail Safety Regulator report revealed the frequency of security-related incidents in the 2013/2014 to 2017/2018 financial years (RSR, 2018). These data are summarised in Table 1.1.

**Table 2.1: Nature and frequency of crimes on trains – 2013 to 2018**

Nature of Crime	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Personal safety on stations	247	278	305	312	401
Personal safety on trains	283	516	368	408	398
Personal safety outside station/platform area	69	115	86	109	124
Crowd-related occurrences	7	2	0	0	13
Malicious damage of property	1019	1094	1158	1162	1717

Source: RSR State of Safety Report 2017/2018, 2018:63

The table above is a summary of security breaches associated with crowd-related incidents in the railway environment. Personal safety on trains, crowd-related occurrences and vandalism of property due to angry commuters increased over four years. Issues related to personal safety on trains as well as personal safety outside station platform areas do not show a rigid pattern. However, any criminal act that impacts commuters is one too many. Maluleke (2010:5) argues that it is no secret that “numerous South African rail commuters who use trains as a mode of transport every day are being exposed to many terrifying criminal deeds such as mugging, rape, robbery, murder and arson”. It is therefore noteworthy when the numbers of particular incidents decrease, and the question that comes to mind is whether the numbers decrease because finally passengers feel safe, or is it because commuters have resorted to other modes of transport.

## **2.8 Commuters’ Perceptions of Public Transport Service Delivery**

Hamid, Tan, Zali, Rohamat, and Aziz (2015:1498) define perceptions as “the act of perceiving or apprehending by means of the sense or of the mind, cognition and also understanding”. According to Vilakazi (2013:1), “public transport functions as a communal transporter on a large scale and is usually configured in such a way so as to provide scheduled services on fixed routes on a non-reservation basis”. “It consists of a range of transport modes, including railway (railroads, light rail, metro/subway/underground railway, high-speed rail, and intercity rail), buses, and airlines” (Newton, 2014:3). Studies that were conducted internationally namely; Ceccato and Paz (2017), National Rail Passenger Survey Autumn (2015) and Cozens, Neale, Hillier, & Whitaker (2004), expressed increasing concern about train unsafety and crimes affecting commuters. These are not problems that occur only in “developed countries such as the United States of America (USA) and the United Kingdom (UK), but they are also prevalent in developing countries such as South Africa” (Kruger & Landman, 2007:76)

According to Statistic South Africa (*Stats SA*) survey, Overcrowding on trains is the most significant problem in KwaZulu- Natal, surveys for KZN and Gauteng have revealed that 62% of commuters in KZN and 81% in Gauteng were dissatisfied with the level of overcrowding in trains (StatsSA, 2014). As a result, discomfort is experienced by commuters as more and more commuters push and shove their way inside the train no matter how full it is. Furthermore, commuters are also unhappy with the lack of communication when trains suddenly stopped or

were delayed and they were then late for work or school. The latter was also considered an issue of poor service quality by Shange (2017).

### **2.8.1 Passenger's perceptions of crime associated with public transport**

Various studies have highlighted the effect of crime and the fear of crime on commuters (Van der Reis, 1997; Page, 2001, National Transport Survey, 2003; Kruger & Landman, 2007). Smith and Clarke (2000:169) observe “crime on public transport covers a bewildering variety of offenses committed on [various] forms of transport including commuter trains, buses and taxis”. Targets of crime in the public transport sphere have been commuters as well as employees of PRASA. Staff members have been subjected to crimes such as assault on ticket collectors while transport stock has been vandalised (Madzivhandila, 2019). However, the centre of attention for this study was on passengers' perceptions of crime on trains and therefore the experiences of staff were beyond the scope of the study.

For the purpose of this study, it was of great importance to generate a comprehensive understanding of key ideas that stemmed from previous research studies in terms of the effect of crime on commuters and their fear of crime when they use public transit. “Crime affects existing and potential users of public transport in different ways” (Kruger & Landman, 2007:113). Pick-pocketing and bag snatching were the most frequent types of crime encountered by commuters. However, “more serious and violent crimes such as assault, stabbings and rape were also experienced. All these incidents occurred in locations associated with public transport such as train stations, bus depots, and on board trains” (Page & Moeketsi, 2000 cited in Badiora et al., 2015 :140).

Different modes of transport help individuals to commute between their places of work and home, but concerns have been raised that the commuting experience may not always be comfortable (Cheng, 2010). It was discovered by the National Transport Survey (2003, Cited in Kruger & Landman, 2009:113) that “crime plays an important role in people's decision not to make use of certain types of public transport”. For example, commuters may have doubts about using taxis because they find them expensive compared to trains, while many commuters who use trains are

dissatisfied with train services as there is a lack of security when they walk to and from stations, arrive at stations, and on trains

In light of the above, the researcher aimed to explore the relationship between crime and the specific characteristics of surrounding areas such as waiting rooms within train stations as to how they attract crime (Kruger and Landman, 2007). Ruddell and Decker (2017:4) assert “that when trains were invented nobody ever envisioned that they might become subjected to train robberies. Criminals, however, foresaw the opportunity and lost no time in taking advantage of the new technology”. In the context of rail systems, certain stops and environments have raised opportunities for attacks on commuters. Kruger and Landman (2009:113) “highlight that crime on public transport covers a wide range of offences that could occur in at least three different types of situations, namely: walking to, from or between transport facilities or stops (from a train station to a destination point such as the workplace and back); waiting at boarding points and facilities (e.g., a waiting room at a station or on a platform); and travelling on board a mode of transport such as a train”.

### **2.8.2 The waiting environment**

In the waiting environment where people gather before boarding a train, many opportunities are created for those with criminal intent (Kruger & Landman, 2007). They use this opportunity to commit crimes such as robbery, pick-pocketing, and assault. Drivers of this behaviour are congestion during peak hours, a lack of passive surveillance during off-peak hours, a lack of safe waiting areas, and no appropriate lighting (Kruger & Landman, 2007). With that being said, a Valley Line study that was conducted in South Wales (UK) suggests that “there are specific times, geographical locations and design features at stations that elicit fear of crime” (Cozens, Neale, Hillier, & Whitaker, 2004:31). For instance, waiting for a train at night in an enclosed brick shelter where there is no security or electricity may increase passengers’ chances of being victimised. Similarly, “a study by the UK Home Office (1996) found that, in the 1990s, one in eight women surveyed mentioned that they felt so unsafe on public transport and that they avoided using it (Kruger & Landman, 2009:114). Comparatively, Root, Schintler, Button and Kenneth (2000) highlight that 10% of women in the United Kingdom (UK) felt between unsafe and very safe when waiting on a railway platform compared to 53% who felt unsafe at such places at night.

### **2.8.3 The pedestrian environment used by commuters**

According to Kruger and Landman (2007), walking to and from points of access to public transport is an integral part of any public transport journey. However, the safety of commuters is often severely compromised as they walk to transport pick-up points from their homes and places of work. When passengers disembark from a train at night at a station where there are no lights and security, they are likely to be victims of crime as they walk to their designated areas. Passengers are also exposed to criminal behaviour on trains.

### **2.8.4 Safety and security on trains and platforms**

Uittenbogaard (2014:11) argues that this specific area of criminology research has been the subject of vivid interest as more and more researchers have devoted time to understanding crime and safety levels in relation to transportation. A survey was conducted on rail commuter which asked participants to comment on their perceptions and experienced of crime and antisocial behaviour on public transport (Passenger Focus, 2009). Of the more frequent (i.e., at least monthly) rail users, 89% had witnessed some form of individual anti-social behaviour such as noisy passengers (75%), drunks (61%), fare dodging (42%), begging (36%), and smoking (28%). Also, 34% had seen people being insulted, 17% had seen them being harassed, and 4% had seen someone being spat at. Attacks had been witnessed by 4% and theft without violence by 4% (Passenger Focus, 2009).

Over the years, various studies have been conducted on the safety of public transportation. Dunckel-Graglia (2013:85), for instance, argues that women often face sexual harassment and violence during their daily commutes, "...particularly in countries with extreme levels of gender inequality". Likewise, findings of a study conducted in Washington have revealed that stations where commuter's safety should be prioritised have become nodal generators of crime due to lack of security officers.

Anti-social behaviour and crime have been considered highly problematic in relations to public train systems by various authors (Cozens et al., 2004; Kennedy, 2008). Diec, Coxon and De Bono (2010:1) define antisocial behaviour as follows:

“[It is an] intimidating or threatening activity that irritates or frightens people, as well as negatively impacting the quality of life in an environment. It can range from minor public nuisance and misdemeanour such as speaking boisterously, playing music loudly, littering, and skylarking, to the more serious criminal acts such as graffiti, vandalism, harassment, assault, and drug use.”

A combination of the environmental design of a station, lack of policing for safety on trains and at stations, and overcrowding increase people’s risk and fear of crime.

Passenger Focus (2009), survey conducted on what commuters desire from stations, notes that the “main concerns of passengers travelling at night and waiting on platforms after 6 pm were: no staff or supervision at the station when returning home late, ticket office being closed, gangs of youths hanging around the station or in the waiting room drinking, lack of people, lack of adequate lighting at stations, and bushes and foliage along walkways/exits” (Passenger Focus, 2009:10). If there is no form of security at stations or on trains reflecting ‘effective authority’, it increases one’s fear of victimisation and chances of being victimised. Therefore, passengers seem to “believe that staff provisioning is the most effective way of improving security at night and that stations should be staffed whenever trains call at them” (Passenger Focus, 2009:10).

### **2.8.5 Lighting**

“Like any other significant infrastructure, lighting plays an important role at railway stations as it provides a sense of safety and comfort” (Hamid et al., 2015:1498). A study by Cozens et al. (2003) on the Valley Line network in the south of Wales, demonstrated that, “at 66 railway stations, 75% of the respondents had personal safety fears when waiting on the platform after dark, while 73% stated such concerns when approaching the railway station after dark”. On the same survey, commuters stipulated that the presence of other commuters at the station assured them safety (Cozens, 2003). “More and better lighting was the most commonly cited suggestion for

improvement as it was mentioned by 68% of the respondents in the latter study” (Cozens, 2003:1498).

### **2.8.6 Availability of security guards or staff**

Commuters argue that having protection at stations and on trains diminishes their level of fear as they believe that, should an offender plan anything ‘dodgy’, security guards are in place to protect them. However, in the absence of effective figures of authority like security guards, commuters live in fear (Hamid et al., 2015). The Department of Transport (2008:26) found that, “among commuters who travelled after dark, only 64% felt safe compared to 98% who felt safe during the day”. Similarly, Work by Transport Focus (2009:26) “discovered that commuters were far less satisfied with personal security and the availability of staff when travelling after 8 pm. Satisfaction with personal security dropped by 12%, from 61% during the day to 49% after dark, while satisfaction with the availability of staff fell from 48% during the day to 37% after dark”.

Based on the declining number of commuters who seemed satisfied with security and staff availability during the day compared with those who felt safe at night, it seems important to consider improving safety and security at train stations by making sure that they are staffed with security personnel during the operational times of trains (Transport Focus, 2009). The absence of security guards at railway stations allows youths and other criminal’s wit nefarious intentions to behave in an unacceptable manner, which instils fear in commuters.

### **2.8.7. Commuters’ behaviour inside trains**

#### **2.8.7.1 Smoking and delinquency**

In South Africa, a Government Gazette strictly prohibits smoking on public transport: “No person may smoke in- (a) an enclosed public place or enclosed workplace, or in or on a public conveyance” (South Africa, 2018). The public is only allowed to smoke in designated smoking areas. However, personal experience and anecdotal evidence have shown that this law is ignored at Metrorail stations and on trains. The researcher personally observed that, on trains from Cato Ridge or from Durban to Cato Ridge, smokers claimed coaches as their own and whoever chose



to sit in that coach had to respect that they smoked, whether you had respiratory disease or not. These people would tell you straight that there were other coaches you could go to. Criminal behaviour is rife in these coaches where passengers gamble, fight, smoke and drink. Other passengers fear for their lives because they are at risk. The question that comes to mind is: *What does PRASA, as the service provider, do to make sure that passengers are safe and follow such simple rules as 'no smoking allowed'?*

“A cycle of fear is thus created on trains when crime is not prevented and this fear results in declining numbers of law-abiding train commuters” (Kruger & Landman, 2007:114). This drop in patronage means reduced guardianship from other passengers and increased risk and these, in turn, further advance adverse consequences for commuters, revenue and security (Smith & Clarke, 2004; Cozens et al., 2004).

#### **2.8.7.2 Sexual crimes in transit**

Ceccato and Paz (2017:4) state that cases of violent crime occur on the São Paulo metro daily. They cite the following incident as narrated by a participant (Ceccato & Paz, 2017:3):

*“I turned around and saw my whole leg soiled. He was closing the zipper of his pants. I despaired and started screaming for help. I was rescued by other passengers, while others held the assailant in the carriage...After this, I did not want to take that route anymore...I decided to go to court against the metro, asking for compensation.”*

A recent survey showed that two out of every three women had been victims of sexual harassment and violence while in transit, while the rate among men was 18% (Datafolha, 2014). In England and Wales, sexual assault and harassment on trains are generally underreported (Gekoski, Jacqueline, Gray, Horvath, Aliye, & Adler, 2015), “with estimates of 75-95% of victims never reporting the incident to the police” (Ceccato et al., 2017:3). Likewise, when passengers were interviewed on various Gauteng train routes, most of them “complained of gropers on early morning and afternoon rush hours [trains] when trains were full. Other passengers claimed that

men fondled their private parts and that, since trains were packed to beyond capacity, identifying the culprit was difficult” (Groped, doped on the train, 2017, City Press).

Ceccato et al. (2017), Gekoski et al. (2015), and Hewitt and Beauregard (2014) assert that an empty train in the evening might allow an offender to see an opportunity to commit a rape. Similarly, crowded rush hours might just provide the right opportunity for groping and all sorts of inappropriate and unwanted sexual behaviours (Madan & Nalla, 2015; Natarajan, 2016, cited in Ceccato et al., 2017).

“The levels and patterns of sexual crimes against women include cases of staring, groping, ejaculation, exposing genitalia, and full rape “(Ceccato & Paz, 2017:12). In South Africa, it is difficult not to raise concerns about the effectiveness and goals of the two main agencies – PRASA and RSR – responsible for passengers’ safety on trains. Questions such as the following may be posed: *Is the government doing enough to address these issues? And Are policies implemented accordingly and is accommodating the needs of passengers a priority as stated in the mission of National Transport Policy White Paper (1998).*

### **2.8.7.3 The effect of overcrowding on commuters**

“Overcrowding refers to high numbers of passengers sharing limited space in one mode of transport, which could result in discomfort on trains or at stations” (Tirachini et al., 2013b:6). Myoya, Gabe and Venter (2018:484) observe “that the current [demographic] pattern seen in South Africa indicates an increase of people migrating from the Eastern Cape, Northern Cape, Free State, and Limpopo to KwaZulu-Natal”. Therefore, “multiple dimensions of passenger crowding public transport modes puts commuters’ wellbeing at risk” (Tirachini, Hensher, & Rose, 2013:1). According to Cox, Houdmont and Griffiths (2006:37), and numerous “sensorial, psychological and social issues have been ... related to high levels of passenger density, including perceptions of risk to personal safety and security, increased anxiety, stress, feeling of exhaustion, possible ill-health, and a propensity to arrive late for work”.

“When the number of passengers waiting at a station is low, they are able to board the first train that arrives on time. However, when the occupancy rate is high, limited capacity becomes an issue (Tirachini et al., 2013b:2)”. As a result, some commuters “waiting to board will be left behind when the first train is full, which increases waiting time” (Tirachini et al., 2013b:5)”. When passengers then rush to board a train, pressing and squeezing in regardless of limited space discomfort all travellers (Tirachini et al., 2013a). Thus, “unreliability, coupled with a lack of communication, results in severe overcrowding of passenger trains which endangers the safety of commuters (Myoya et al., 2018:492) ”.

Myoya et al. (2018:484) “case study on platform-train interface occurrences at a Metrorail station demonstrated that overcrowding occurred because passengers feared that, if they had missed the train that had just arrived late, the next scheduled train might not even arrive or, if it arrived, it might have been very late, and this created a rush for any available train”. The findings of the latter study confirm that Metrorail train schedules can be “critically unreliable and this, coupled with a lack of communication, results in severe overcrowding of passengers on the first train that arrives during rush hour” (Myoya et al., 2018:492). This in turn causes “an increased risk of platform-train interface (PTI) incidents” (Myoya et al., 2018:492). As a result, “rushing to get to one’s destination may result in pushing and shoving during peak hours which increases the risk of sustaining severe injuries” (Myoya et al., 2018:493). In light of the abovementioned concerns related to overcrowding on trains and platforms, the need to ensure commuters’ safety seems paramount. Feelings of unsafety when using trains raise the question of *how can their journey then be “enjoyable, refreshing and safe” as promised by PRASA?* (PRASA, 2015).

Due to high level of overcrowding commuters health is likely to be affected (Mahudin, Cox, and Griffith). For instance, scholars such as “Mahudin, Cox, and Griffith (2011:4) found that commuters with greater levels of stress and exhaustion attributed to crowding reported more somatic symptoms like headaches, tension, stiff muscles and sleeplessness”. The tendency of not arriving early at work has also been attributed to the impact of crowded trains and instances when passengers missed a train due to overcrowding (Myoya et al., 2018). Tirachini, Hensher and Rose(2011:41) assert that “passenger crowding is characterised by three different psychological components”:

“(i) Evaluation of the psychosocial aspects of a crowded situation (unpleasant, disturbing, cluttered, chaotic, dense, disorderly and confining); (ii) evaluation of the ambient environment of the crowded situation (including the items hot, smelly, stuffy and noisy); and (iii) affective reactions to the crowded situation (including the items irritable, frustrated, tensed, distracted, stressful, hindered, restricted, uncomfortable and squashed).

“Existing empirical data and related models have shown the detrimental effects of crowding on travellers’ comfort and general wellbeing. These effects, in turn, influence travel decisions such as mode, route and departure time”(Tirachini et al., 2013a:7).

#### **2.8.7.4 Quality of service on trains**

Quality of service comprises the following dimensions: reliability, communication, information, and safety and security (Saputra, 2010).

##### **Reliability**

This is the ability to deliver to the promised quality of service certainly and accurately. It also means to perform a service right the first time and honouring the firm’s promises (Parasuraman et al., 1985). Examples of providing a reliable service include train availability as per train time tables, trains arriving on time at their destinations, constant communication with passengers when there will be a delay or cancellation of a particular train, and available staff to assist passengers day or night as long as a train still operates (Saputra, 2010).

##### **Information and communication**

Information is an important tool to ensure the safety and comfort of passengers. Passengers need information in order to get reliable service. Operators should therefore give clear information to passengers by any means possible (Transport Research Board, 2003a).

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

Safety and security in transit begins from stepping onto the station until travelling by train safely and securely without any criminal action (Saputra, 2010:18). For example, sufficient safety

measures against crime should be in place on trains as well as at waiting stations (Heyns & Luke, 2013).

Parasuraman (1985, cited in Saputra, 2018) “defines service quality as a measure of how well the service level delivered matches customer expectation”. Furthermore, Edvardsson (1997) acknowledges that the service provided should satisfy customers’ expectations, needs and requirements.

Drawing from the three definitions of service quality provided above, it is noteworthy that these scholars share the same sentiment of what service quality is. A common term is customer satisfaction. What is implied by this term is that the service that is provided by service providers should meet customers’ expectations. In order to understand the challenges faced by commuters using public transport, it is important to refer to some studies from the developing and developed world (Govender, 2014). One study that was conducted in Scotland by the Scottish Department of Transport identified more than thirty service attributes, ranging from punctuality and reliability of the service to quality and the type of environment at the station (Govender, 2014). Dissatisfaction with these services decreases the patronage of train commuters, and thus public transport organisations should deem it important to fulfil commuters reasonable needs at all times (Samson & Thompson, 2007). According to the Land Transport Authority (2013), research that was conducted in Singapore in 2012 suggests that public transport services should attend to extent of their service, communication between the train agency and passengers, and inclusivity. With the issue of service quality in mind, Lombard and Hugo (2002:3) quote a South African commuter who stated:

“In general, the Department of Transport of our land is a headache. Operators make a big profit because the government subsidizes them and, at the end of the day, they do not bother about us, the passengers. You sit in the train and the train’s windows are broken. The other problem is that the train doors jam all the time. We sit with all these problems and you get a hell of a headache and then it sometimes rains as well”.

This passenger's expectations certainly did not correlate with the service delivered by the Department of Transport and rail agencies, as per the argument raised below;

There are two categories of rail passengers: those commuters who are contented with the service that they get and those who are dissatisfied. The bottom line is that "majority of Metrorail users are not satisfied with this mode of transport" (Shange, 2017:66). The StatsSA (2014), cited in Heyns & Luke 2018:472) states that, in Gauteng, "commuters were dissatisfied with the level of crowding on trains, train punctuality, travel time, and the distance they have to travel between their residences and train stations". Other factors that contribute to dissatisfaction among commuters are the low frequency of trains during off-peak and especially peak hours and lack of security from train stations to residential areas. Moreover, poor communication between the service provider and commuters results in late arrivals at work and at school (StatsSa, 2014).

## **Conclusion**

Given these points, there is evidence that PRASA needs to revisit and improve the service that they provide. This body needs to focus on basic issues such as reliability, effective communication, and safety and security in order to align the service that they offer with commuters' expectations. In fact, they should work hard to meet their mission, vision and value statement to regain the trust of the public.

## **CHAPTER THREE: THEORETICAL FRAMEWORK**

### **3.1 Introduction**

This chapter introduces the theoretical framework that underpinned the study. There are many factors that might prompt one to study crime and victimisation for the benefit of understanding how and why crime occurs. In this respect, different theories came about to support studies conducted by researchers. “A theory can be defined as a set of concepts linked together by a series of statements to explain why an event or phenomenon occurs” (Tibbetts & Hemmens, 2009:120). Two theoretical perspectives were used in the current study, namely the routine activities theory and the crime pattern theory. Both theories connect real-life incidents to assumptions that have been studied over the years, and they play a major role in making researchers as well as readers understand why and when crime occurs.

### **3.2 The Routine Activities Theory (RAT)**

The routine activities theory is rooted in the work of Lawrence E. Cohen and Marcus Felson (1979). It was later *further refined* by Felson and has become “...one of the most widely cited and influential theoretical constructs in the field of criminology and in crime science more broadly” (Miró, 2014:1). In essence, the theory argues that, “for a crime to occur, there needs to be an interaction in time and space between a motivated offender, a suitable target, and the absence of a capable guardian” (Cohen & Felson, 1979:589). These are three important elements that contribute collectively to the commission of a crime (Makhaye, 2016). This theory is explained “as any recurrent and prevalent activity which provides for basic population and individual needs, whatever their biological or cultural origin is” (Cohen & Felson, 1979:593). “Such activities could be an individual’s daily activities that can take one away from home, or it could be going to school or work every day. This theory further argues that any changes in routine activities can influence crime rates by facilitating the meeting in space and time of the three elements, namely the motivated offender/s, suitable target/s, and the absence of capable guardians (or a guardian) ” (Cohen, 1979:593).

“The routine activities theory is both a micro and macro approach to explaining crime” (Larue, 2013:9). Felson (2008:70) explains the micro and macro approach as follows:

“The micro perspective examines the convergence between offenders, targets, and guardians in time and space, whereas the macro perspective examines the characteristics of the larger society and social structure which make the convergence of these three elements possible.”

Therefore, the confluence of these components results in the commission of a crime. “Transit environments are a fertile territory for sexual and other types of abuse and harassment. For instance, an relatively empty train in the evening might just allow the anonymity that an offender needs to commit a rape” (Gekoski, Gray, Horvath, Edwards, Emirali, Adler, & Joanna, 2015, cited in Ceccato & Paz, 2017:5). Similarly, crowded rush hours might provide the right time for groping and all manner of ill-suited sexual behaviours (Gekoski et al., 2015).

As per Fisher, Sloan, Cullen, and Lu explanation (1998, cited in Makhaye, 2016:32), “the routine activities theory describes patterns of victimisation by associating crime with victims’ proximity to offenders, exposure to criminal behaviour, and attractiveness levels, either through symbolic or economic value, or a lack of guardianship”. Transit environments such as stations are characterised by certain features that render them alluring targets for the perpetrators of crime and that generate a fear of crime (Makhaye, 2016). These include lack of lighting at stations at late hours, waiting platforms frequented by gangs and youths drinking and smoking, and bushes and foliage along walkways/at exits (Transport Focus, 2009).

Felson and Cohen (1980 Cited in Makhaye, 2016:22) further stress the “importance of how victimisation probably becomes a function of the social, even ecological, convergence between opportunistic potential offenders and insufficiently guarded potential targets of crime”. It is argued that structural changes in routine activity patterns can influence crime rates by affecting the convergence in space and time of the three minimal elements of direct-contact crime: (i) motivated offenders; (ii) suitable targets; and (iii) the absence of a capable guardian (Felson & Cohen, 1980). These three elements, which substantiate the routine activities theory, will be elaborated on in order to explain how victimisation in transit modes and at train stations occurs.



### **3.2.1 Motivated offender**

Makhaye (2016:33) states that “a motivated offender is known as a person who most likely leaves home in the morning with the mentality that if he/she gets a chance to commit a particular crime, then he/she will”. The offender has already weighed the cost against the benefits of committing the crime, and his/her main goal is to obtain something of value from committing the crime. Weighing the cost and benefits before committing a crime helps offenders to know at which places to attack and where not to attack, which people to target and which not to target, as well as why such specific places and people are the only ones that should be targeted.

For criminal to commit an offence, there must be motivation (which plays a key role in crime commission), a suitable target, and the absence of a capable guardian. When these three converge, it creates a good opportunity for an offender to commit a crime. However, if there is no commitment or motivation the offender will not commit that crime or, if the cost of committing the crime outweighs the benefits, then there is zero crime commission (Makhaye, 2016). For example, a criminal will not be motivated to snatch a bag when a security guard, CCTV, or many commuters are present on a platform waiting for a train. The perpetrator might think twice about committing this crime because it is highly possible that he/she will be caught by the security guard, on CCTV, and or be spotted by other commuters. The CCTV, security guards and commuters thus serve as ‘capable guardians’.

### **3.2.2 Suitable target**

Suitable target is characterised as “anything or anyone that can provide instant profit to offenders” (Argun & Dağlar, 2016:1189). This might be an individual walking alone around the evening time from the train station or a person sitting in an empty train without security guards around. In an absence of a capable guardian the motivated offender uses this chance to victimize suitable targets (Badiora, Adewumi, Ojewale, Okunola, & Habeeb, 2015). Coupled with victimisation is being at the wrong place at the wrong time. In this regard, there are victims who are targeted by offenders as a result of their daily activities. The perpetrator studies victims’ daily routines and then initiates a plan to decide when and where to victimise them. There are those people who become victims of opportunistic crime. These are the victims who were targeted because a good opportunity

presented itself and it happened by chance that the victim was alone at a place where it was easy to victimise him or her (Makhaye, 2016).

### **3.2.3 Lack of guardianship**

The last element of the routine activities theory is lack of guardianship. Hollis-Peel, Reynald, Van Bavel, Elffers, & Welsh (2011:54) define guardianship as “the physical or symbolic presence of an individual (or group of individuals) that acts either intentionally or unintentionally to deter a potential criminal event”. An example of this could be commuters sitting together or walking together from the railway waiting room to where they live, ticket staff and security guards. In the same way, “any person who in the performance of his or her daily activities can, through presence or activity, protect him- or herself, protect others, or protect his or her own or others’ property” (Miró, 2014:3).

“ A capable guardian can also be someone going about their daily routine, such as a bystander or neighbour who may deter a crime by their presence” (Paulsen & Robinson, 2004:102). Transit environments “are known as hot spots and places that have motivated offenders, suitable targets, and a lack of guardianship” (Makhaye, 2016:34). On the positive side, trains transport many people at lower cost compared to other modes of transports and this mode of transport will contribute positively on the economy if more people use trains. However, this mode of transport is coupled with different types of crime such as theft, robbery, violence and sexual assault.

Potential criminals lurk consistently around or at train stations. For instance, motivated offenders can either be commuters or outsiders (people who do not take a train but know about the vulnerability of commuters). Suitable targets are commuters on the train as well as at stations, and a capable guardian can either be CCTV, commuters themselves, security guards, lighting at a stations, panic buttons found inside trains, and PRASA staff such as ticket collectors. These three elements take part in determining the definition of the routine activities theory and how it effectively explains crime (Makhaye, 2016).

### 3.3 The Crime Pattern Theory

Patricia and Paul Brantingham (1993 cited in Larue, 2013:15) “used concepts from the routine activities theory, the rational choice theory, the geometric theory of crime, the opportunity theory, and the lifestyle exposure theory to create the crime pattern theory”. This theory uses common concepts from these criminology theories to better understand how criminals select their targets. The crime pattern theory is thus informed by the concept of routine activities and is embedded within the legal, psychological, social and physical environments of human activities (Andresen, 2010). In particular, it examines “the influence of the physical and social environment on the distribution of crime events over time and space as well as the way targets come to the attention of offenders” (Eck & Weisburd, 2015:6).

Brantingham and Brantingham (1993a:226) argue that the crime pattern theory “describes an event that occurs when an individual with some criminal readiness level encounters a suitable target in a situation sufficient to activate that readiness potential”. According to Brantingham and Brantingham (1993b:261), “crime is an event in which a motivated offender decides to commit a crime and locates a potential target within their awareness space”. “As individuals go about their daily activities without knowing that they are suitable targets, they make decisions that become routine and create a template that guides their behaviour” (Brantingham & Brantingham, 2008:80). Hiropoulos and Porter (2014) assert that the “crime pattern theory is based on the premise that crimes do not occur randomly or uniformly in time and space, [but that] there are patterns to which criminal activity occurs. Criminal opportunities found at places that come to the attention of offenders thus are at risk of creating targets (Brantingham & Brantingham, 1993). “The concept of place is essential to the crime pattern theory, it links places with desirable targets and the context within which they are found by focusing on how places come to the attention of potential criminals”(Newton, 2004a).

This theory comprises seven propositions (Larue, 2013). “The first explains that some individuals have the motivation to commit specific offences and that this motivation differs from person to person (Brantingham, 1978). The second proposition is that the commission of an offence is the result of a multi-staged decision process in which an offender locates a target within the environment in time and space. Thirdly, the environment emits cues about the spatial, cultural,

legal and psychological characteristics of an area” (Brantingham & Brantingham, 1978, 107). Brantingham (1978:107) further asserts that “motivated offenders use these environmental cues to identify targets”. The fifth and sixth propositions are that “motivated offenders learn which cues are associated with good targets [and], by experience, they develop crime templates and search patterns. Then, once a template is established, it becomes fixed and self-reinforcing, influencing future behaviour” (Brantingham & Brantingham, 1978:108). There are other crime templates as well, but they were beyond the scope of this study.

### **3.3.1 Crime generators and crime attractors**

Hiropoulos and Porter (2014:20) postulate that, “central to the explanation of the concentration of crime at certain locations are the concepts of crime generators and crime attractors”. According to Brantingham and Brantingham (2013:89), “crime generators are particular areas to which a large number of people are attracted for reasons unrelated to any particular level of criminal motivation they might have or to any particular crime they might end up committing”. These places have high numbers of people (victims and offenders) for reasons unrelated to crime such as shopping or watching movies or sports, and this automatically gives offenders a place and time for criminal opportunity (Larue, 2013). Thus, local and outside offenders do not come to these areas with the intent to commit a crime, but motivated offenders may end up committing a crime in these locations as and when the opportunity presents itself (Brantingham et al., 2008).

Brantingham et al. (2008:89) highlight that, “...as these areas are well known to motivated offenders as areas that create criminal opportunity for particular types of crime, they become crime attractors”. Crime attractors are places that are known for criminal opportunities which are known to offenders (Hiropoulos & Porter, 2014). Potential victims gather near or inside these facilities, or may themselves be vulnerable to criminal penetration, such as bars, parking lots, or large shopping malls, particularly those near major public transit exchange. “Offenders with criminal intent are attracted to these places because of the known opportunities for particular types of crime, and they may become activity nodes for repeat offenders” (Brantingham et al., 2008:20).

### **3.3.2 Nodes, paths and edges**

These are three major concepts of the crime pattern theory as a framework for environmental criminology (Badiora, Ojewale, Okunola, & Habeeb, 2015). According to Brantingham, Brantingham and Wong (1991, cited in Buckley, 1996:11), “different forms of transportation cluster people together in different ways, shape travel time differently, cluster destination differently, cluster travel paths differently, and shape the type of crimes that occur by creating different opportunity sets for crime”.

#### **3.3.2.1 Nodes**

Hiropoulos and Porter (2014:20) explain the term nodes as “a term from transportation which refers to where people travel to and from and such areas have a tendency to generate crime within and also nearby”. Examples of nodes include transit terminals such as metro stations and key intersections where individuals come together to use a specific mode of transport and as a result daily routine is formed. Thus “each offender searches for crime targets around personal activity nodes such as homes, schools and roads” (Badiora et al., 2015:141).

#### **3.3.2.2 Paths**

According to Hiropoulos and Porter (2014:20) paths are defined as “the actual paths that people take to and from their personal activity nodes such as home, school, work and entertainment areas”. The routes or paths that individuals take in their everyday activities are closely related to where they fall victim to crime (Badiora et al., 2015).

#### **3.3.2.3 Edges**

Hiropoulos and Porter (2014:20) refer to edges as “the boundaries of areas where people live, work, shop, or seek entertainment”. Victimisation may take place in or near these areas because people from different areas who do not know one another come together at edges. Examples of crimes that occur at these edges are robberies or shoplifting. In this context the “distinction

between insiders and outsiders is important, because insiders usually commit crimes closer to their own neighbourhoods, while outsiders find it safer to offend at the edges than to retreat to their own areas” (Badiora et al., 2015:141).

Various studies have been conducted using the crime pattern theory. For example, the work of Levine et al. in California in the 1980s found that certain crimes, for example rape, homicide, and robbery, were more frequent when there were low pedestrian traffic, low surveillance, and many concealed areas (Newton, 2004). Furthermore, Burrell (2007:12) argues “that violent acts of crime on public transport tends to happen in the late evening/night-time when there is less supervision, whereas pocket picking and purse snatching are more frequent during the rush hour”. A common finding is that transport hubs act as crime attractors for dissimilar crimes at different hours of the day (Newton, 2014).

In a nutshell, transit modes encourage patterns of crime by creating opportunities and gateway potential for criminals who target high-risk populations (Brantingham et al., 1991). Transport stations are often congested with a large number of people and this presents opportunities for crime (Newton, 2004). “At certain times of the day, these crowds and the characteristics they exhibit (for example, commuters during rush hour) may produce suitable conditions for a particular type of crime (for example, attract offenders who believe there is opportunity to pick pockets), and hence stations may act as a crime attractor” (Newton, 2004:13).

Buckley (1996:13) explains that “the search for targets involves looking near the usual travel paths between travel nodes”. Other crimes that occur in major public transit stops are characterised by a high number of people waiting for a train (Buckley, 1996). “Edge effects come into play where there is enough distinctiveness from one part of the physical environment to another that the change is easily noticed” (Buckley, 1996:13). In essence, criminals look for their targets in places that they are familiar with or activity nodes where they spend most of their time. They thus follow primary paths as they move between or among nodes (Brantingham et al., 1991).

## **CHAPTER 4: METHODOLOGICAL ORIENTATION**

### **4.1 Introduction**

This chapter introduces the research methodology that was utilized to collect data that would help in addressing the objectives of the study. Thus the research design, the sampling procedure, as well as the data collection tool and method of analysis will be discussed. To ensure reliability, the ethical considerations and procedures that were adhered to will also briefly be outlined while the challenges and limitations will be acknowledged. The data were collected by interviewing train commuters at a Metrorail station in Durban using an interview schedule.

### **4.2 Research Methodology**

This model includes basic knowledge related to the subject, appropriate research methods, and the theoretical framework that is employed to enlighten a particular context (Lather, 1992). “In essence, the research methodology of a study is indirectly motivated by what the researcher already knows and directly driven by what the researcher aims to discover” (Makhaye, 2016:38). Both these elements contribute to the choice of methods that a researcher adopts and they determine how the study progresses. “Describing the methods used by a researcher is very important, because it enables another researcher to replicate the study, as well as to ascertain the validity and reliability of the findings” (Ngulube, 2003:20).

### **4.3 Research Paradigm**

Kuhn (1970:175) states that a paradigm is “a set of beliefs, values and techniques that is shared by members of a scientific community and which acts as a guide or map that dictates the kind of problems scientists should address and the types of explanations that are acceptable to them”. This study followed an interpretive paradigm approach using qualitative research methods as it aimed “to understand the way in which human beings make sense of their subjective reality and attach meaning to it” (Denzin, 1989:7). The interpretive approach was used to probe the verbal responses of train commuters using semi-structured interviews in an attempt to understand their beliefs, behaviours and attitudes regarding the threat of crime on Metrorail trains (Ngubane, 2016).

A qualitative research was used when conducting this study. Corbin and Strauss (1990:10) “define qualitative research as any type of research that produces findings not arrived at by statistical procedures or other means of quantitative [calculations]”. The qualitative approach of research draws its findings from analysing people’s behaviours and the way they view their lives. Furthermore, “it seeks to understand and interpret how various participants in a social setting construct the world around them” (Glesne, 2006:20).

By conversing with passengers using an interview schedule, the researcher was able to capture their responses to gain in-depth information about the issue under study (Makhaye, 2016). Barton and Lazarsfeld (1979, cited in Makhaye, (2016:39) “identify four primary phases of qualitative research: (i) exploration (which helps to analyse research objects, identify indicators and establish classifications and typologies); (ii) discovery of relationships among variables (which enables the researcher to make comparisons and arrive at conclusions about the significance of certain factors that address the objectives and aim of the study); (iii) the establishment of integrated constructs (or themes); and (iv) the testing of hypotheses”. This investigation focused on passengers’ perceptions of crime on Metrorail trains and the questions that were posed consistently considered the objectives and aim of the study. For this purpose, the researcher drew upon the routine activities theory and the crime pattern theory in order to understand the issues that drive or mitigate crime in transit.

In conceptualising and executing research, two types of data sources were employed, namely primary and secondary data. The primary data were collected by means of voice recorded in-depth one-on-one interviews and note taking with the participants’ consent. Secondary data were collected by referring to academic sources such as books, journals and articles.



#### **4.4 Profile of Durban**

The city of Durban where various Metrorail stations are located is popular for its beaches and recreational activities. Johnson (2018:84) explains that Durban “Is located between Umgeni Road and Masabalala Yengwa Avenue to the north of the central business district. Most rail services in KwaZulu-Natal pass through the two main stations in central Durban, namely Berea Road station and Durban station, These stations are the main terminals of intercity rail services from Johannesburg and Cape Town” (Johnson ,2018:84). They also serve as hubs for commuter rail services that stretch from KwaDukuza in the North, Kelso, to Scottsburg, Umkomaas, Amazintoti and Isiphingo to the South, and to Cato Ridge inland (PRASA, 2010). The study was thus purposively conducted in the city of Durban where train commuters congregate. The Durban area includes areas that are both urban and rural in character, and the socio-economic conditions within these areas cover the comprehensive spectrum of both high and low income groups (Marx, 2002). Both public and private transport systems are employed in the study area (Marx, 2002).

Commuters use “eight basic rail routes (main lines) radiating from Durban” (Integrated Transport Plan, 2010:3,11). These main lines follow north, south and west : South Coast mainline, West mainline, New mainline (Cato Ridge), Old Main Road mainline, KwaMashu mainline, Umlazi mainline, North Coast mainline, and Crossmore mainline (ITP, 2010) . On these lines are stations where passengers either embark or disembark in the area where one reside (ITP, 2010). For example, a person who is going to Umlazi cannot take a train which is going to Stanger, simply because it does not go on that route. The lines are categorised as follows:

**Table 4.1: Main railway lines in the Durban area and their destinations**

<b>LINE</b>	<b>DESTINATIONS</b>
South Coast Line	From Kelso, Scottsburg, Umkomaas , Amazimtoti and Isiphingo to central Durban
West Line	From Durban to West
New Main Line	From Durban to Cato ridge and vice versa
Old Main Line	From Durban to Pinetown
KwaMashu Line	From Durban to Kwamashu and vice versa
Umlazi Main Line	From Durban to uMlazi and vice versa
The North Coast Line	From Stanger through Tongaat, Verulum and Durban North to central Durban
Crossmore Line	From Durban to Crossmoore and vice versa

Source: PRASA, 2010

Involving commuters from these eight mainlines offered the researcher the opportunity to obtain rich knowledge as they had both similar and a variety of challenges associated with Metrorail trains.

The researcher's decision to target Durban as the study area was influenced by gaps in research on railway commuters' experiences, as existing studies on passengers' perceptions of crime in transit had been conducted in countries outside South Africa. Moreover, areas in and around Durban – such as Umlazi, Cato Ridge and KwaMashu – are notorious for the prevalence of crime in transit. Sampling commuters from this city was also prompted by the researcher's personal observations and experiences. Various commuters had complained about train services yet they felt compelled to use railway transport as it is the most cost-effective mode of transport in South Africa. In one instance, a commuter swore upon his life that he would never take a train again due to a bad experience. Commuters also lamented that certain Metrorail routes were treated as more important

than others because delays and cancellations were fewer on these routes than others. However, there were also those who complimented Metrorail services without hesitation. Having listened informally to commuters' experiences of the Metrorail system, the researcher realised that it would be of paramount importance to conduct a formal study, not only to address passengers' concerns and to be heard by the service providers, but also to take a small step in supporting the country's socio-economic wellbeing and healing the hurt of so many who suffered due to a poor public transport system.

#### **4.5 Sampling**

Kumar (2019:117) asserts that "sampling is the process of selecting a few cases from a bigger group, which is the entire population, to become the basis for estimating or predicting the prevalence of an unknown piece of information, situation or outcome regarding the bigger group". To control the number of participants in a study a sample size is required. A researcher may therefore have a sample which will represent the entire population.

The sample size for this study was 20 participants who were selected using non-probability sampling. Selecting a large population makes it difficult to analyse data, however using a sample helps the researcher use the resources at his/her exposure much better (Venter & Strydom, 2012). Hence, selecting only 20 participants was sufficient for the reliability of the study. The researcher used purposive sampling to select the participants. Bhattacharjee (2012:69) states that purposive sampling is a technique according to which "respondents are chosen in a non-random manner based on their expertise on the phenomenon being studied".

Thus, the researcher makes a decision as to what needs to be known "and sets out to find people who can and are willing to provide the information by virtue of their knowledge or experience" (Tongco, 2007:147). This sampling technique was suitable for this study because a representative sample of train commuters was selected to share their perceptions of crime in Metrorail trains. This ensured the collection of empirical data and avoided the use of assumptions about crime in trains. In this context, sampling commuters who were waiting to board a train was deemed important because the majority had been using trains for a long time and others had recently started using this mode of transport as they commented when asked during an interview how long they

have been using trains. The sample included both female and male commuters of ages ranging from 18 to 45 years. The reason why this age group was selected is because, when an individual reaches 18 they do not necessarily need consent from parents. Choosing participants who were below 18 would have delayed the process of data collection because participants below that age would need to go their parents to give them consent to participate in the study, whereas as participants who have reached 18 knew that they can sign the consent without parents approval as long as they understand what they are signing for. On the other hand, the researcher choose 45 as a cut off because in most cases older people who their age ranges from 50 to 60 years hardly use trains , those that are still working use taxis. Challenges such as overcrowding which result into one standing on their feet until they arrive on their destination is what pushes them to use taxis. Interviewing both these categories of commuters helped the researcher identify developments or regressions in the rail sector and to find out the current state of the Metrorail trains.

#### **4.5.1 Procedures followed**

When conducting a research study, one cannot simply decide on their own on the research site they are going to use without following correct procedures (Ngubane, 2016). As a UKZN student, any research study that involves human subject requires the approval of UKZN Research Ethics Committee, therefore a researcher need to send a research proposal in order to be granted ethical clearance. After the researcher sent in the application, ethical clearance (was granted for full approval of the study to be conducted. According to Neuman (2004:441, Cited in Ngubane, 2016:70) “gate keepers are those formal and informal authorities who control access to a site”. The researcher met up with PRASA officials to introduce study, find out if there are any concerns and seek endorsement, a gate keeper letter was issued by management within two weeks. All these steps were undertaken.

#### **4.5.2 Recruitment strategy used to study participants**

The principle researcher waited on particular platform where the researcher knew the commuters would board a train for a particular line. The participants were than purposively approached on their main line and recruited for the study based on main Metrorail line used on their journey home, work or school. They were briefed on the research study and what it entails. As Durban station is

the central station in the city of Durban with eight mainlines the researcher went to each line to introduce the study as well as recruit commuters. The sampling technique used in this case was purposive sampling which allowed the researcher to select respondents who can provide the best information to achieve the objectives of the study (Kumar, 2011). This was achieved by ensuring that participants selected for the study are train commuters who fall within the eight mainlines mentioned earlier. The purposive sampling technique allowed for the researcher to select 20 participants in Durban which was sufficient to obtain information needed.

The suitable time for conducting interviews was during off-peak hours when the commuters came back from school or work rather than in the morning when they were rushing to arrive at their destination. The researcher interviewed commuters who took afternoon trains ranging from 13h00 to 17h00. The researcher was at the station from 12h00 every day for data collection until the data were saturated. The reason for the researcher's early arrival at the station prior to the actual train time was because it was possible to find commuters on the platform waiting for an afternoon train should they have missed earlier trains. This then gave the researcher time to introduce the study and also to obtain the consent of the commuter to participate in the study.

#### **4.6. Data Collection**

Kumar (2011: 220) defines data collection as “the most important phase in research as the quality of the evaluation of the findings is entirely dependent upon the data collected”. The primary technique the researcher adopted was conducting one-on-one interviews with the respondents. A voice recorder was used and notes were recorded. Permission was granted by the participants to audio record the conversations (Appendix A). The analysis of responses can only be carried out with confidence if there is an entire record of a conversation. “Hastily scribbled notes...are not accurate enough to be used in this way. Tape recorded sessions provide the only viable data for this kind of analysis” (Pile, 1990:217).

#### 4.6.1. Interviews

The actual interviews took place in one of the offices that was made available by PRASA at the train station (Durban station). Each interview lasted about 20 minutes. All safety precautions were adhered to in the context of Covid-19 safety regulations, which will be addressed thorough in a subsequent section.

**Table: Number of commuters interviewed from each main line**

MAINLINE	NO. OF PASSENGERS
South Coast mainline	2
West mainline	2
New mainline (Cato Ridge)	4
Old Main Road mainline	2
KwaMashu mainline	2
Umlazi mainline	4
North Coast mainline	2
Crossmore mainline	2
<b>Total</b>	<b>20</b>

#### 4.6.1 Collecting data during level 3 of the Covid-19 lockdown period

Undertaking qualitative research at the time of the Covid-19 lockdown presented several issues related to community engagement as it was difficulty to adhere to normal of face-to-face interview requirements. Often, in qualitative research, observing facial expressions helps to obtain non-verbal signals during an interview. However, the use of facial masks limited this facility and the researcher could follow non-verbal cues through eye contact only. Because the individual face-to-face interviews were conducted inside an office, keeping a distance of more than 1.5 m from one

another was important for a low risk of infection. The participants were thus required to speak loudly enough for the interviewer to hear their responses and to ensure that the voice recorder picked up every word. Compliance with hand washing and sanitizing before entering the office was not a problem as the commuters interviewed understood the significance of doing this in order to ensure protection against Covid-19 infection.

#### **4.6.2 Data analysis**

In the process of analysing data from the themes that emerge from interview transcript, a thematic analyses was used. It is defined as “a process of analysing data using themes from data” (King, 2003 cited in Mkhize, 2010:71). Lengthy excerpts were made from the interview transcript, hence the researcher deemed necessary to use thematic analysis in order to organise data that emerged from transcripts. Braun and Clark (2006:79) discuss the benefits of using thematic analysis by stating that “thematic approach does not only describe or organise data but it also facilitates the interpretation of a range of suspects of the research topic”.

Therefore, the researcher listened to tape recording that were done during an interview, transcription of the data (interview) from tape to paper and reading over the written transcripts repeatedly followed. This is done to “get to know your data” and find out how results are looking like. The next step was coding where relevant pattern of experiences/perceptions of crime shared by commuters were labelled. The researcher then went through the codes created in the previous step to identify most important and relevant data to create themes. Subsequent to this step, related patterns were gathered and listed under sub-themes. In the process of data interpretation the researcher had repeatedly to go back and forth. Once comprehensive meaning or explanation was derived from the bit and pieces of information given by the participants, the researcher then moved on to the step of reporting the findings as per commuters shared information during the interview. Related or opposing themes from the literature were connected with the finding.

## **4.7 Ethical Considerations**

In research, various ethical principles have to be considered before a research is conducted, such as confidentiality, respect, and informed consent. According to (Kumar 2011:17), “all professions are guided by a code of ethics that has evolved over the years to accommodate a changing ethos, values, needs and expectations.” Good work ethics are thus a key requirement. The researcher and participants need to establish and understand the ground rules before participants agree to be part of a study. This means that the aim and objectives of the study must be outlined before the data collection stage. The researcher must thus explain the process and obtain voluntary consent from the participants

In adherence to the above requirements, gatekeepers’ written permission was obtained to conduct the study (Appendix D) and an informed consent form (Appendix A) was signed by the participants before the interviews began. They also gave permission for the use of an audio recorder on the same form. The consent forms were read aloud by the researcher in both English and *isiZulu* to ensure that all participants understood what was expected of them. The participants were informed of their right to withdraw from the study at any time should they feel so inclined.

### **4.7.1 Informed consent**

According to the National Commission for the Protection of Human Subjects (1979 cited in Kumar, 2011:220), “all informed consent procedures must meet three criteria: participants must be competent to give consent; sufficient information must be provided to allow for a reasoned decision; and consent must be voluntary and un-coerced”. In this research this was discussed with participants, all the required steps were followed and all the commuters who were interviewed gave their consent without coercion. The participants were kept abreast of the research aim, objectives and research questions, and they were guaranteed of their right to confidentiality and anonymity throughout the data collection, data analysis, and reporting stages. Pseudonyms are thus used in this dissertation when referring to the individual participants.



## **4.8 Challenges and Limitations of the Study**

### **4.8.1 Challenges**

When conducting the study, the researcher came across various challenges that were overcome. For instance, the paucity of academic literature was a challenge when writing the literature review. The topic under study had not been explored locally, meaning that most of the studies on the topic had been conducted outside South Africa in countries such as Brazil, or in another province such as Gauteng. Background information was thus obtained with reference to international studies simply because there were too few studies on the topic in the South African context.

Accessing commuters was not a problem as many sat at the station on their platform while waiting for their train. However, a major problem was approaching strangers and introducing the study to them while they were waiting for a train. The moment the train arrived, the potential interviewee would leave. Others would not pay attention as they were frustrated that their train was running late which sometimes made it impossible to introduce the study. Noise was also a problem while recruiting and the researcher often had to repeat herself. However, after recruitment, the participants were interviewed in a safe and secure office that was made available by PRASA, as was stated earlier.

The letter of ethical approval by the institution of study was only received during stage three of the Corona virus pandemic. At that time trains were not operating and the researcher had to wait until the government allowed trains to run again. The researcher had to be cautious about the risk of contracting or spreading the virus and therefore personal protective equipment such as gloves, masks and sanitizer was distributed to the participants and a distance of at least 1.5 m was maintained between persons as per the government's safety precautions. Language was not a limitation as the researcher was able to conduct the interviews in isiZulu or English, whichever language the participant preferred, and translated the responses into English.

#### **4.8.2 Limitations**

It was impossible to determine the commuter population of the eight main Metrorail lines under study. Data were simply not available from PRASA at the time of the study due to Covid-19 lockdown procedures and limited available staff. It was also impossible to make an estimation due to the interruptions caused by lockdown regulations. However, as the quantification of data was not the aim of the study, a sample size of 20 was deemed adequate to achieve saturated qualitative data. It is acknowledged that, as the study was restricted to only 20 participants as representative of thousands of commuters, the findings of the study may not be generalised to the entire population.

It has been mentioned that Metrorail operates more than one station in the Durban area. However, for practical purposes, the commuters were recruited and interviewed at only one main Metrorail station (Durban). As commuters from all eight main lines were recruited, they were representative of the areas serviced by the lines, albeit in small numbers.

#### **4.9 Research quality**

The four criteria that were used to measure the quality and rigour of this qualitative research were as follows: transferability, conformability, credibility, and dependability (Cameron, 2011:6).

##### **4.9.1 Transferability**

Bitsch (2005), Tobin and Begley (2004, cited in Anney, 2014:277) state that “transferability refers to the degree to which the results of qualitative research can be transferred to other contexts with other respondents – it is the interpretive equivalent of generalizability”. A researcher will use different sources and provide thick descriptions to enhance the study’s validity and transferability to related context, circumstances and situations. Through thick descriptions and appropriate sampling methods, the researcher facilitated the transferability of the study. For instance, by triangulating the primary and secondary data, the findings of the current study were compared with those of other studies on the perceptions of crime in transit, with specific reference to Metrorail users. The researcher therefore ensured that the history of public transport, specifically that of

trains, was outlined for the reader to understand how, where and when the problem of crime in transit originated.

#### **4.9.2 Conformability**

Conformability is concerned “with establishing that data and interpretations of the findings are not figments of the inquirer’s imagination, but are clearly derived from the data” (Tobin & Begley, 2004:392). This term refers to the degree of neutrality of the findings of a research study’, meaning that it ensures that the findings have been shaped by participants and not by the researcher. In the current study, the researcher explored commuters’ perceptions of crime on Metrorail trains by giving commuters a platform (no pun intended) to share their experiences with the researcher. Hearing commuters share their truth was an eye opener.

Conclusions were not drawn based on the literature that the researcher had read before the interviews, but by listening to the views of commuters who used this mode of transport every day.

## CHAPTER FIVE: DATA ANALYSIS AND DISCUSSION

### 5.1 Introduction

This chapter presents a discussion on the analysed data and elaborates on the findings of commuters' perceptions of crime on Metrorail trains. The data that were collected by the researcher using semi-structured open-ended interviews were analysed using a thematic analysis. The researcher went over and over among the literature, the theories, and the research questions and read the transcripts of the recorded interviews thoroughly. Thereafter, the themes were then coincided to create a comprehensive narrative, or picture, of the findings. Similarities and dissimilarities were highlighted and are discussed in this chapter. Pseudonyms are used in this report to refer to the participants, which adheres to ethical requirements for research. The total number of participants was 20. All participants spoke *isiZulu* and therefore their responses had to be translated into English by a competent translator.

The themes that emerged from the data are presented and discussed in the sub-sections below.

### 5.2 Reasons for Using Trains as a Mode of Transport

All 20 of the participants travelling on the eight different mainlines stated that they commuted using trains because it was the cheapest mode of transport available to them. Moreover, the stations were close to where they worked and lived and they could save money. For instance, Mondli (27) used the Umlazi line weekly to work and back. He said:

*"I use the train weekly from Monday to Saturday. The first reason why I use a train is because it is affordable. Secondly, it drops me close by the area where I stay. I do not have to walk a long distance to my home."*

Smanga, who was a student using the North Coast mainline to Stanger when going to school, commented:

*"I use the train every day, almost 25 days in a month. I am able to save money since I am not working."*

Menzi (New mainline) stated:

*“I use a train during working days Monday to Friday when I am going to school. The reason why I use the train is because I am unemployed and also my parents are not working. Using this mode of transport saves money as the return fee that I pay when going to school is only R16.50 compared to the taxi fee which is R40.”*

These comments refer to the socio-economic status of people using the rail sector which suggests that “public transport enhances personal economic opportunities and saves individuals money in the sense that passenger transportation use lowers household expenses and frees up more income for other needs” (Vilakazi, 2013:22). Some interviewees who were still at school admitted that their parents were unemployed and could not afford to give them money to use taxis to go to school. As a result, they used trains as it was cheaper. These conversations reflected the low socio-economic status of the population that makes use of Metrorail services.

Fester’s (2018) evaluation of evidence of transport expenditure and affordability in South Africa for low-income and mobility-challenged commuters found that public transport affordability and expenditure differed significantly between urban and rural areas. This scholar argues that, as much as trains are cheaper, the family circumstances of commuters force them to use trains. This finding is consistent with that of the Integrated Transport Plan which proposes that poorer communities are entirely dependent on public transport, mainly trains, as it is cheap (ITP, 2010). Poor populations generally do not own or have access to private vehicles and therefore mainly rely on public transport for mobility to and from their places of work, and they thus rely on rail transport. As a result, they are the ones who are most affected by a lack of adequate or inconsistent public transport (ITP, 2010).

Vilakazi (2013:21) argues that “public transport claims a significant portion of, and is a substantial contributor to, the country’s Gross Domestic Product (GDP)”. Not only does more affordable train fare help commuters to save money, but it also enhances economic growth within the rail sector. This means that a growing number of people who use trains is good for business and the economy

of South Africa. However, a declining number of commuters who use trains results in a challenged economy as far as public transport, and specifically rail transport, is concerned.

### **5.3 Challenges Faced by Commuters Using Trains**

Some participants admitted that there were various challenges associated with train transportation. Fester (2018) also reported negative and unsatisfactory commuter experiences that differed notably from the user-focused, affordable and time-efficient public transport service that the 1996 White Paper on National Transport Policy promises to deliver. Participants in the current study shared the same views. For instance, they raised concerns regarding the quality of service provided by train transport agencies, particularly because cancelations, delays and overcrowding were rife. Eighteen of the 20 commuters complained about regularly not arriving on time for work and school. For instance, Mbali (New mainline) said:

*“No, I do not arrive on time when I am going to work. I believe that the reason for this is because trains do not arrive on time at the stations which results in one not arriving on time at his or her destination. Another reason as to why trains do not arrive on time at the stations is because Newline is currently faced with the problem of using one railway route, meaning that the trains that are departing from Berea station (Durban) to Cato Ridge use the same route as the ones that are departing from Cato Ridge to Durban. Therefore, to avoid any collisions, if one train has departed from Berea to Cato Ridge no train from Cato Ridge is to be released.”*

Syanda (Umlazi line) stated:

*“Well, days are not the same in most cases. I do not arrive on time for the reason that, if you are dependent mainly in this mode of transport, you will find cases where you will be told that due to cable theft the train will be late or cancelled. As a result I will have to wait for the next train if I do not have money for a taxi.”*

Sisanda, who had been using new mainline trains for 25 years, said:

*“I used to arrive on time years ago, but now it is worse. I do not arrive on time because the train that I used to take 7 to 8 years ago is no longer available. The train times have also changed.”*

When the participants were asked if they got updates should a train be delayed or cancelled, they had all experienced both, but information about cancellations or delays was varied. Mbali commented:

*“Yes. Updates are given through loudspeakers that let us know which trains will be late or are cancelled”.*

Syanda said:

*“There is an office where we buy tickets. Updates come from them when there is going to be any delay or cancellation of a train.”*

Sisanda stated:

*“In the morning at 5h30 Thabile from uKhozi FM usually gives us an update on the train service – whether it is going to be late or cancelled. However, if you missed listening to Thabile then you will find yourself sitting at the station waiting for a train that is either late or cancelled. As train commuters we have come up with a strategy of creating a WhatsApp group where we update one another if there is going to be any delay or cancellation.”*

All the commuters faced challenges such as the unreliability of arrival times of trains, poor communication between PRASA and commuters should there be delays or cancellations, and overcrowding on Metrorail trains due to these cancellations and delays. According to the literature, commuters have raised concerns that railway services are unreliable (Lombard and Hugo, 2002). Providing a reliable service as promised by the White Paper on National Transport Policy (1996:20) means train availability as per train time tables, trains arriving on time at their destinations, constant communication with passengers when there will be a delay or cancellation of a particular train, and available staff to always assist passengers, day or night, as long as trains still operate (Saputra, 2010). However, the commuters revealed that these principles were not

adhered to. This finding is similar to a finding by Fester (2018), who state that commuters experience poor communication between the service provider and commuters as they are not given updates when trains have to suddenly stop or have been cancelled. This results in late arrivals at work and school. Consequently, if commuters encounter the same problem three times a week, it becomes very challenging when they must report to their employers each time they arrive late for work due to train delays. Unfortunately, this places some people's jobs on the line. One commuter referred to a letter issued by PRASA that commuters should give to their employers when a train was late or cancelled as proof that their late arrival at work was not their fault. For instance, Mondli (Kwa-Mashu) stated:

*"Yes, I know that should it happen that the train is late, a commuter can go to the PRASA office and ask for a letter to hand in to the employer or at school which explains that the train was late. However, asking for this letter every time the train is late leads to employers not taking this matter seriously, which does not serve the purpose of securing one's job."*

Overcrowding as a result of delays and the cancellation of trains was mentioned by 18 of the 20 commuters representing different mainlines. These commuters felt that overcrowding was a common issue on trains. Only two commuters (Crossmore and KwaMashu) felt that overcrowding was not common on these lines. For instance Sizwe (19) from Stanger, who used the North Coast mainline, said:

*"I think overcrowding differs from time to time. The morning trains as well as afternoon trains are overcrowded as people are going to work and coming from work. On this line there are times where commuters will stand or sit in areas where it specifically states 'Do not stand, sit or lean on the door', but what else can they do because it is full?"*

Zanele (Cato Ridge) vehemently stated:

*"First of all, overcrowding in trains has become a norm. As Newline commuters we are currently faced with cancellation of most trains. As more trains are cancelled, the number of people who will be using that one or those two trains that were not cancelled increases and results in health and emotional problems. Due to lack of space inside you will find commuters pushing and shoving one another. Some want to jump off and others are looking*



*for a space where they can stand. It does not end there: some commuters end up not jumping off at their stations because there is no space to get off. There are also cases where train doors are loose and leaning next to it is dangerous. How can you not lean when the train is packed?”*

Lungi (KwaMashu) made reference to the Umlazi mainline when referring to overcrowding:

*“Overcrowding on KwaMashu trains is nothing compared to Umlazi. By this I mean that it is rare to find commuters standing inside the train just because there is no space to sit.”*

Snenhlanhla, who worked in Jacobs and used West mainline trains, shared the same view as Lungi:

*“West mainline trains are hardly [rarely] overcrowded.”*

This study revealed that overcrowding was associated with delays and the cancellation of certain trains which resulted in severe overcrowding. Judging from commuters’ responses, the more consistent and reliable train schedules are, the more accommodative they are to commuters. This means that if trains arrive on time without any delays or cancellations, the easier it is for commuters to board without being pushed and shoved. However, more delays and cancellations lead to more overcrowding which is coupled with discomfort and frustration because, ultimately every commuter wish to arrive at his or her destination on time. This finding is similar with that of Myoya et al. (2018), who established that overcrowding occurred because passengers feared that if they missed even a train late, another train might not even arrive or, if it arrived, it would be far too late for them to meet their own deadlines at work or at school. These feelings of confusion and worry put commuters at risk of injury and emotional trauma due to pushing, shoving and stress.

#### **5.4 Safety and security**

Contrary to the feelings of frustration and concern expressed by the majority of the commuters because of overcrowding, some stated that they felt safe in crowded spaces rather than in quiet spaces. For instance, when Silindile (Old Main Road mainline or the Pinetown train) was asked whether she felt safe and comfortable at a station and on a train, she said:

*“I feel safe and comfortable on a train as long as there are other commuters. However, as more and more commuters disembark at their stations, fear of being mugged or victimised kicks in, especially as there are no security personnel on the train.”*

This comment is informed by the routine activities theory which suggests that, in the absence of a capable guardian such as security staff or other commuters who act as guardians, a motivated offender is likely to use this opportunity to target the few commuters who are on a train, especially in the evening.

#### **5.4.1 Commuters’ perceptions of crime on Metrorail trains**

The researcher wanted to probe the insights of commuters regarding crime on Metrorail trains in general. The views of the commuters varied somewhat. Fourteen commuters from different mainlines believed that crime was common on trains and at stations depending on the time of day or evening, whereas six did not believe that it was common. Those who believed crime was common represented the new mainline (Cato Ridge), Umlazi, Stanger, KwaMashu and Crossmore. The tone of voice of these commuters reflected their fear of victimisation as they shared their experiences, while others could only speak of their observations and what they had heard.

Mondli (Cato Ridge), who worked day and night shifts as a security guard, attested to being victimised while a robbery was in progress on the train. Mondli stated:

*“I used to hear people saying that the 7 o’clock evening train to Cato Ridge was not safe at all. At first I did not pay much attention to that since I had been working for two years using this mode of transport, but I had never been a victim of crime or witnessed any criminal behaviour. Who would have thought that one day it would be me who would be shot in the leg while a robbery was going on? On that day I swore on my life that I would never use trains again, no matter how broke I was. I mean, I almost lost my life.”*

Michael had this to say:

*“I would say crime is common in trains that operate during the day where there are not so many people on the train. However, on the afternoon trains it is not common because there are plenty of commuters.”*

Innocent shared his perception of crime by stating the following:

*“Committing crime on a train is very easy. I remember the day when I travelled to my destination using an old ticket and the PRASA employees who checked the tickets at the station did not see that I was using an old ticket that had expired long ago”.*

One can only surmise that, if a commuter was able to get away with a misdemeanour so easily, it would be much easier to try another ploy a next time and get away with it.

This finding is informed by the routine activities theory which proposes that, during the day, there are higher costs than benefits when committing a crime in the presence of other commuters on the train or at the station. A potential offender will thus be intimidated by the fear of being caught should he or she commit a crime. However, at night and in the absence of security staff as well as other commuters (‘guardians’), it is not risky to break law as the possibility of being caught (the cost) is less while the benefits of not being caught are higher.

#### **5.4.2 The cause of crimes committed on trains and at stations**

According to the empirical findings of the study, the root cause of crime on trains and at stations is a lack of security. The participants of this study corroborated accounts of previous studies about fear of crime as a result of lack of security, such as those reported by the Transport Focus (2009) study. For instance, when Mondli (Cato Ridge) was asked if security staff had been patrolling inside the train when he got shot, he said:

*“No, there was no security staff on the train. If there had been maybe I would not have got shot”.*

This comment is enlightened by the RAT argument, which suggests that crime is the result of the “convergence of three elements: a motivated offender, a suitable target, and the absence of capable

guardianship” (Nguyen, 2019:189). In Mondli’s case, the absence of security staff on the train resulted in the motivated offender seeing this as an opportunity to commit a crime and commuters who were on that train happened to be suitable targets. This was echoed by Sbo (Cato Ridge), who said:

*“In the morning I take the 6h00 train Code: 1029 and in the afternoon I take the 4 o’clock train Code: 1072. I have never seen any security staff or police within these time slots.*

In relation to overcrowding that contributes to crime, when Nonhle was asked if she believed that overcrowding resulted in crime, she unhesitatingly said:

*“Yes, because when it is overcrowded one’s chances of being pick-pocketed are high.”*

Lelo, who happened to be a victim of pick-pocketing, shared her experience as follows:

*“I do not know how it all happened, but the train was packed and when I disembarked at the station, the outside zip of my bag had been opened and my phone was not there.”*

Policy dictates that commuters’ expectations should correlate with the service delivered by the Department of Transport and rail agencies (Beriao & Cabrao, 2007; Eboli & Mazulla, 2007). However, this study found that this was not the case. Overcrowding, the unreliability of train arrivals and departures, and a lack of security staff at stations as well as on trains raise questions about how commuters’ safety is ensured under such dire circumstances. For instance, Lethu (Crossmore) stated:

*“Yes. Due to overcrowding some commuters use this problem to their advantage in such a way that they will not pay for a train ticket but rather dodge those who check the tickets. This is criminal behaviour.”*

Ncebo (North Coast) commented:

*“On the train that I am using the level of overcrowding is very high. Commuters even sit in areas where they are advised not to sit but they do so because there is no more space. Others will even sit in the first coach outside the locomotive where the driver is. Others will sit on the windows because some trains do not have glass in the windows. The fact that some sit in areas that are restricted is crime itself.”*

These responses support the notion that, in the absence of a capable guardian, the chances of being victimised or committing a crime increase. Hamid et al. (2015) also found that commuters felt that being protected at stations and on trains eased their level of fear as they believed that they would be protected by security guards. However, in the absence of an effective authority such as a security guard, commuters live in fear.

#### **5.4.3 Commuters' suggestions for curbing crime on Metrorail trains and how to improve PRASA's quality of service**

The respondents shared various ideas on how to curb crime on trains, with the predominant suggestion being the presence of effective security staff. The majority agreed that they felt unsafe when there were no security guards on a train and at a station, and they strongly proposed that security measures offered by PRASA be revised.

### **5.5. Conclusion**

Based on the findings, much has to be done by PRASA to fight against crime on Metrorail trains. This should begin by addressing all the issues that the commuters raised and that may be considered as contributing factors towards crime on trains. The commuters' suggestions provided insight into existing Metrorail gaps and where improvement is necessary not only to limit, but to eventually eliminate crime from Metrorail lines. The findings revealed that overcrowding on trains was a common issue that commuters from different mainlines encountered. The commuters felt that, due to the unreliability of arrival and departure times and the sudden cancellation of trains, overcrowding resulted. When commuters were given the opportunity to share their thoughts on what should be done to address the issue of crime on Metrorail trains across all mainlines, their comments focussed on reliability and safety. Their proposals are presented in Chapter 6.

## **CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS**

### **6.1 Introduction**

This study was conducted with the aim of exploring commuters' perceptions of crime on Metrorail trains in the Durban area. This chapter presents the general conclusions that were drawn from the data. Recommendations based on the findings of this study are offered and suggestions for future research are made.

### **6.2 General Conclusions**

Several general conclusions were reached. The study was guided by a sound qualitative methodological framework and the following objectives that the study aimed to address:

- To explore commuters' perceptions of crime on Metrorail trains;
- To determine the dangers of overcrowding on Metrorail trains;
- To determine rail commuters' expectations of the quality of the service rendered by PRASA;
- To explore the role of security, or the absence thereof, on trains and at stations; and
- To examine the effectiveness of measures implemented to curb overcrowding and crime on Metrorail trains.

#### **6.2.1 Commuters' perceptions of crime on Metrorail trains**

This study found that the types of crime committed on Metrorail trains and at stations were serious in nature. This was evidenced by the reports some respondents made that they had fallen victim to crime, whereas others had heard of incidences but had never fallen victim to a crime on a train. The outcomes of actual experiences of crime differed between those who had fallen victim and those who had not been personally affected by an act or acts of crime. For instance, one participant stated that he had sworn on his life that he would never use a train again. However, those who had never fallen victim to crime but had only heard of it stated that, as much as they felt unsafe, there

was nothing that they could do because using a train was their only affordable mode of transport. Moreover, the person who had sworn not to use rail transport again had obviously been compelled to do so, as he had been recruited along with the others at a railway station where he had been waiting for a train.

These findings suggest that, as much as safety should be their first priority, the commuters had surrendered to how unsafe Metrorail trains are. The crimes they were exposed to were intermittent as they did not occur only on afternoon trains but also on morning trains. The crimes could therefore generally be regarded as opportunistic. Although most of the crimes occurred opportunistically at times when there was no security and only a few commuters on the trains, crime also occurred when the trains were overcrowded. The difference between the two is that different types of crime occurred at different times. In support of the aforementioned statement, the table presented above proves that there is a relation connecting the type of crime and time of the day. For example, commuters from Crossmore Mainline were victims of common attacks due to few commuters and no securities inside the morning train, whereas crimes such as pick-pocketing or theft of personal belonging inside the train were common crimes in Cato ridge and uMlazi as there is high level of overcrowding in these areas inside trains allowing perpetrators to conduct crime during peak-hours.

### **6.2.2 The dangers of overcrowding on Metrorail trains**

Findings obtained by this research study revealed that overcrowding was one of the common challenges that commuters across all eight mainlines raised. The literature revealed a pattern in that a growing number of commuters have reportedly started using trains due to the affordability of this mode of transport. However, the notion exists that, as the number of commuters grows, the more unsafe and unreliable train services become. In this study, overcrowding was associated with limited space on trains and therefore personal discomfort increased, particularly as delays caused late arrivals and more people thus took trains that arrived first. This study found that overcrowding on trains caused “daily trauma”, especially for mainline commuters who were discomforted by pushing, shoving and congestion. A common complaint was that trains got so full that some commuters could hardly disembark or board trains. Such congestion caused increasing anxiety,

stress and weariness. None of the participants had actually been injured due to shoving, but they foresaw this as an imminent possibility.

### **6.2.3 The expectations of rail commuters regarding service delivery by PRASA**

Customers routinely compare their expectations (what they feel service providers should offer) with their perceptions of the performance of the service provider (Gronroos, 1982; Parasuraman et al., 1985). This research study found that some commuters were satisfied with the Metrorail service but most were not. Although not in so many words, some commuters implied that PRASA was not providing the service that they promised in their mission, vision and values statement and they thus distrusted the service delivery potential of RSR and PRASA (Heyns and Luke, 2013). PRASA as a rail agency should uphold the values they expound such as service excellence, safety, and communication, but this was clearly not the case. Commuters from the eight different mainlines under study raised issues such as the unreliability of the train service and inadequate operational times. The commuters angrily referred to broken windows, loose doors and unsafe conditions on trains. They encountered or were aware of criminal behaviour, and thus their expectations of safe, comfortable and enjoyable journeys by train were thwarted.

### **6.2.4 Protection on trains and at stations**

It was found that the lack of safety and security on trains and at stations was an unsettling issue for the commuters as this exacerbated opportunities for the commission of crime and commuter victimisation. The respondents noted that the unavailability of security guards on trains was a most disturbing factor and that this contributed to crime. This situation is illuminated by the crime pattern theory which argues that crime occurs when an individual who is at a criminal readiness level encounters a suitable target in a situation that is sufficiently conducive to activating that readiness into action (Brantingham & Brantingham. 1993). This theory supports the notion that, in the late evening or at night when no supervision (security guards) on a train or at a station is visible, crime is likely to occur as such places and situations act as crime attractors and crime generators( Ceccato et al.,2013) . The commuters expressed that the lack of protection on trains and at stations not only encouraged offenders to consider trains as crime zones, but it also increased



fear among commuters as they were likely to fall victim to crime. Based on the commuters' responses, it seems urgent that trains as well as station should be staffed with security personnel who will patrol consistently to ensuring that commuters are safe. As a result, commuters will be content as they will feel that they are actually taken care of as the consumers of PRASA's services.

#### **6.2.5 Strategies that can be applied to curb overcrowding and crime on trains**

The participants offered various suggestions for crime prevention and overcrowding on trains. Research has shown that there is a relationship between overcrowding and crime on trains, and therefore it is important to address both issues. One commuter acknowledged that, as much as PRASA was to be blamed for the poor service that they delivered, commuters could not run away from the fact that they (the public) were also responsible for some of the problems they experienced. He argued that commuters complained about delays and cancellations that resulted in overcrowding, but it was they (the public) who had stolen cables that caused malfunctions. He stated that it was therefore illogical to expect trains to operate normally.

Moreover, it was argued that pick-pocketing on overcrowded trains was not caused by random people, but by fellow commuters and residents. The participants thus suggested that, in as much as the quality of Metrorail services needed to be improved by for example providing more trains on busy lines and employing security personnel at all times, commuters should also act responsibly by not promoting criminal behaviour.

### **6.3 Recommendations for crime prevention on trains and effective service delivery by PRASA**

The participants' perceptions of crime on Metrorail trains informed in-depth reflection on what could and should be done to address crime as an issue that affects Metrorail commuters. The respondents' proposals mostly centred on security as a key issue. They frankly and commonly shared their concerns of threat and insecurity when no security staff is available on trains and at stations. Their consolidated suggestions should encourage PRASA to improve security measures and review its implementation of policies that focus on and guide security measures for the safety and comfort of commuters. In fact, because the majority of the participants commented on a sense

of insecurity when they used trains, it seems that PRASA does not abide by its legal and policy mandate to ensure a safe and secure transport system for commuters. The commuters thus offered key suggestions that are presented here as recommendations for improved Metrorail services:

- Security staff should be visible at stations and on train's at all operational hours. If a last train leaves at 19h30, for instance, security staff should be visible. Regular patrols are also necessary, which means that guards should walk around and not remain stationary in one location.
- More trains should be operational to improve service punctuality and reliability and to reduce journey cancellations, delays, and overcrowding.
- The method of communicating delays and cancellations to commuters must be revised and improved.
- Railway lines must be improved so that trains will be able to intersect rather than wait for one another to pass. This will also avoid collisions and delays.
- Union representatives should oversee PRASA's safety measures and care of commuters. They should ensure that the services offered by the service provider are user-friendly for commuters so that vandalism and the burning of trains due to frustration are curbed.
- Buses should be available as plan B to transport commuters to their place of work should a train be cancelled.
- PRASA officials should regularly interview commuters to monitor client satisfaction on a regular basis. They should understand the experiences and frustrations of commuters to alleviate the challenges they encounter and to improve service delivery.

## **6.4 Recommendations for future studies**

There is a need for further research to address the effectiveness of the measures that are implemented by PRASA as well as the DoT to curb overcrowding and crime on Metrorail trains as well as at stations. This study will serve as a valuable departure point for such studies as common issues that were highlighted throughout the discourse need to be more closely examined against the legal framework for public transport and the actual measures that are in place to address legal and policy requirements. Such studies should address the recommendations as well as areas that were beyond the scope of this study for a more holistic picture of the issues plaguing the public transport sphere and, ultimately, for the benefit of commuters.

## **6.5 Conclusion**

When boarding a train, the public's expectations are that their safety and security are paramount considerations of the service provider and that they will be safeguarded against crime and intimidation. Communities know that railway safety regulators such as PRASA have the legal mandate to enforce the safety performance of all railway operators in South Africa and to abide by safety standards and regulatory practices for the protection of persons, property and the environment (RSR, 2002). In this regard, the National Railway Safety Regulator Act No. 16 of 2002 plays a pivotal role in ensuring the safety of all commuters. However, commuters are persistently plagued by victimisation, fear and personal discomfort when they travel on Metrorail trains at any time of the day. This study revealed alarming incidents of crime on Metrorail trains and the impact of criminal behaviour on law-abiding commuters. A disturbing fact is that the participants acknowledged that many incidences of crime – albeit petty crimes such as bag-snatching and cell phone theft in most instance – remained unreported. Persistent victimisation and crime on trains not only diminish rates of patronage, but also increase fear among innocent bystanders and those who may have heard about these incidents but have never been victims themselves. When such information is in the public domain, it will render Metrorail services notoriously 'dodgy' and therefore preferably avoidable. Surprisingly, although the commuters expressed concern and one had even feared for his life, they persisted in using this mode of transport. The main reason seemed to be the financial viability of rail transport. This persistent patronage means that not only are commuters accommodated, but the increasing numbers of

people who use trains support the public transport sector which, in turn, supports the South African economy. It is thus very important that the Passenger Rail Agency of South Africa (PRASA) work with commuters instead of against them to fight against crime on trains and to enhance commuters' safety and comfort by improving the services that it offers.

As far as could be ascertained, this was the first study that was conducted specifically in Durban and that aimed at addressing perceptions of crime on Metrorail trains in this area. The findings of this study were consistent with those of Vilakazi (2013), who also found that commuters in Johannesburg were unhappy with the quality of the services provided by railway service providers. This corroboration indicates gaps between what the quality of service to commuters should be as expounded by the White Paper on National Transport versus what the service actually is in real life.

This empirical qualitative study involved commuters across all eight mainlines running from Durban to determine the extent of commuters' experiences of crime on trains. As the majority of the commuters representing these lines expressed concerns about the nature and frequency of crime on trains, the study echoes alerts signalled by previous studies that crime on trains and at stations is an issue that should be resolved as a matter of urgency.

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## **APPENDIX A in English**

### **CONFIRMATION OF INFORMED CONSENT**

**NB: The interview is not a test, therefor there is no right or incorrect answer.**

**Study Title:** Public Transit and Crime. An exploratory study on commuter's perceptions of crime in Metrorail trains: A case study of Durban station.

Researcher: Ms. Nokulunga Nxele	Supervisor: Ms Londeka Ngubane
Contact details:	ngubaneL2@ukzn.ac.za
	031 260 2060
University of KwaZulu-Natal	University of KwaZulu-Natal
School of Applied Human Science	School of Applied Human Science
Department of Criminology and Forensic Studies	Department of Criminology and Forensic Studies
Qualifications:	Master of Social Science
	Bachelor of Social Science Honours
	Bachelor of Social Science



Dear esteemed participant.

I, Nokulunga Nxele a master's student at the University of KwaZulu-Natal hereby request your full participation in this study which seeks to explore commuter's perceptions of crime in Metrorail trains.

### **Description of Project**

#### Objectives

- To explore commuters perceptions of crime in Metrorail trains.
- To determine the dangers of overcrowding in Metrorail trains.
- To determine rail commuter's expectation of service quality at PRASA.
- To explore the role of security in trains and stations.
- To examine the effectiveness of measures implemented to curb overcrowding and crime in Metrorail.

The study seeks to explore commuter's perception of crime in metro rail which will help to understand the inner experience of challenges that they come across.

#### Procedure

The researcher will make arrangements with each participant in accordance to one's availability. The interview will be conducted at the office found in the station, preferably where there is little or no disturbance. The duration of each interview will approximately take 1 hour.

#### Probable benefits

The study will contribute towards information on scholarly journals pertaining public transport and crime. Increasing knowledge as well as a deeper understanding on commuter's perceptions of crime in Metrorail trains.

### Anonymity and Confidentiality

Anonymity and confidentiality are ensured as real names of participants will not be stipulated in the thesis and on the publication of the research. Participants will be fully protected from any harm as the questions pertaining to the research are not personal, the time frame is short /minimal ensuring no physical distress or exhaustion to the participant. The participant may withdraw from the study should they experience discomfort in the questions asked. All participants will be debriefed to ensure that participants feel no harm or anxiety from the study.

### Recording of interviews

Your participation in this study entails consenting to participating in the interview. The in-depth interview will run for approximately 1 hour and will be documented using an audio- recorder. Participation in this study is voluntary, the participant has a right to say if they are not comfortable with being recorded and they also have a right to withdraw from the interview should it happen that they no longer wish to proceed. Apart from interviewing the participants I will also be taking notes down of what the participant has to say with regards to the question asked. Notes will be transcribed at a later stage and made available for data analysis. Please indicate by ticking below if you allow to be recorded during the interview using an audio equipment or not.

	<b>Willing</b>	<b>Not willing</b>
Audio equipment		

Your full participation in the study will be of great assistance to the completion of the study.

### Participant declaration

I ..... Understand the basis of the topic understudy and am voluntary willing to participate in the study. I fully understand that there is no right or wrong answer. I have the right not to have my interview recorded. I am aware of my right to voice any discomfort in the questions asked moreover the notion to disengage should I feel I can no longer continue.



## APPENDIX B in English



### **INTERVIEW SCHEDULE**

#### **GENERAL QUESTIONS**

1. What is your name?
2. How old are you?
3. What is your current occupation?(student or working)
4. Where do you live, and which main line do you use?
5. How often do you use the train and why?
6. Do you always arrive on time at your destination? Please tell me more.
7. What is your perception of crime in trains?
8. Do you find crime common in trains? Please tell me more
9. Have you ever been a victim of crime while waiting at the station or while on board?
10. While on board and waiting at the station, do you feel safe and comfortable? Please tell me more
11. Are security services offered by PRSASA inside the trains and in stations?
12. As a passenger, are you satisfied with the security service that is offered by Passenger Rail Agency of South Africa (PRASA)? Please tell me more

13. What would you say about the train fare that you pay in relation to the service that you receiving? Please tell me more.
14. Are you satisfied with how waiting rooms are designed? Please tell me more.
15. Do you feel that overcrowding in trains has an influence on the crime levels that are currently experienced by passengers?
16. Based on the security service quality dimension, are you willing to use trains more often or less often in the future? Please tell me more
17. Do you receive information/ updates prior when trains are cancelled or will be delayed?  
How does it help you?
18. What do you think can be done to improve challenges faced by commuters concerning the functioning of Metrorail trains?



## **INTERVIEW SCHEDULE IN ISIZULU**

### **IMIBUZO**

1. Ungubani igama lakho?
2. Uneminyaka emingaki?
3. Ingabe uyafunda noma uyasebenza?
4. Uhlalaphi, futhi usebenzisa muphi umzila wesitimela?
5. Usisebenzisa kangaki isitimela futhi kungani usebenzisa sona?
6. Ingabe ufika ngesikhathi njalo lapho uyakhona uma uhamba ngesitimela? Ngicela ungichazele kabanzi.
7. Uthini umubono noma imicabango yakho ngezinga lobugebengu ezitimeleni?
8. Ingabe izinga lobugebengu likhona ezitimeleni? Ngicela ungichazele kabanzi.
9. Ingabe usuke waba isisuli sobugebengu ulindile esiteshi noma ukuso isitimela?
10. Uma ukusona isitimela okanye ulindile esiteshini, ingabe uzizwa uphephile futhi wenethezekile? Ngicela ungichazele kabanzi.
11. Ingabe ezokuphepha zikhona ezitimeleni naseziteshini?
12. Njengomgibeli ingabe wenelisekile ngezokuphepha eziqinisekiswa abaphathi bezitimela (PRASA)? Ngicela ungichazele kabanzi.

13. Ungaphawula uthini ngenani olikhokhayo njengomgibeli uma uliqhathanisa nezinga lempatho oyitholayo kubathathi bezitimela (PRASA) njengomgibeli? Ngicela ungichazele kabanzi.
14. Ingabe wenelisekile ngohlobo lwesakhiwo samagumbi okulindela isitimela? Ngicela ungichazele kabanzi.
15. Ingabe ukugcwala kwezitimela kunawo umthelela kwizinga lobugebengu elibhekene nabagibeli?
16. Mayelana nezinga lokuphepha ezitimeleni, ingabe usazimisele nokuqhubeka usebenzise isitimela okanye wehlise izinga lokusisebenzisa ezikathini ezizayo? Ngicela ungichazele kabanzi.
17. Ingabe uyasithola isaziso noma ulwazi ngaphambi kokuthi uye esitimeleni umangabe singeke sibe khona isitimela noma sizongahambi ngesikhathi? Kukusiza ngani ukuthola lesisaziso?
18. Ingabe yini ocabanga ukuthi ingenziwa ukulwisana nezinkinga ezibhekene nabagibeli besitimela?



## **APPENDIX C**

E1155 Bhekisizwe road

Dassenhoek

Pinetown

3610

To whom it may concern

### **Request for Permission to conduct research**

My name is Nokulunga Nxele, and I am a Criminology Masters candidate at the University of KwaZulu-Natal. The research I wish to conduct for my master's Dissertation is titled "Public Transit and Crime. An exploratory study on commuter's perceptions of crime in Metrorail trains: A case study of Durban station". This project will be conducted under the supervision of Dr. Londeka Princess Ngubane, a Criminology lecturer at the University. I am hereby seeking your consent to approach several train passengers to fulfil the requirements of the chosen topic.

This research project has the following objectives:

- To explore passenger perceptions of crime in Metrorail trains.
- To explore how the absence of an effective authority plays a role in fuelling passengers concerns for their personal security in waiting stations/shelters and inside the trains.



- To determine the dangers of overcrowding in Metrorail trains.
- To assess recommendations that are to be implemented to curb overcrowding in Metrorail trains which is associated with crime, safety and security.

Upon completion of the study, I undertake to provide PRASA with a bound copy of the full research report. If you require any further information, please do not hesitate to contact me on 0842981809 or email: Nokulunganxele1@gmail.com or you can contact my supervisor at 031 260 2060 or email at: ngubanelp@gmail.com/ngubanel2@ukzn.ac.za. Thank you for your time and consideration in this matter.

Yours sincerely,

Nokulunga Nxele

Criminology and forensic studies

University of KwaZulu-Natal



22 May 2020

Miss Nokulunga Nxele (213526573)  
School Of Applied Human Sc  
Howard College

Dear Miss Nxele,

Protocol reference number: HSSREC/00001104/2020

Project title: Public Transit and Crime. An exploratory study on commuter's perceptions of crime in Metrorail trains: A case study of Durban Stations.

Degree: Masters

### Approval Notification – Expedited Application

This letter serves to notify you that your application received on 04 March 2020 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. **PLEASE NOTE:** Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 22 May 2021.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC 040414 040).

Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

---

Humanities & Social Sciences Research Ethics Committee  
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001, Durban 4000  
Tel: +27 31 260 8350 / 4557 / 3587  
Website: <http://research.ukzn.ac.za/Research-Ethics/>

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To: Nokulunga Nxele  
(Masters Student)  
UKZN

From: D. Hattingh  
Head- Business Development  
Metrorail KZN

Cc:

Date: 10 June 2019

**"Public Transit and Crime. An exploratory study on commuter's perceptions of crime in Metrorail trains: A case study of Durban".**

Thank you for your application to conduct a study on the subject matter above. Permission is granted to conduct surveys at stations on rail commuters on condition that:

1. There is no interference with commuter movements and general operations
2. That a copy of your final paper be submitted to this office, upon completion.

We wish you success in the completion of your research and are happy to assist if required.

Kind regards



Danny Hattingh  
Business Development  
Metrorail KZN

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SCHOOL OF APPLIED HUMAN SCIENCES

Public Transit and Crime. An exploratory study on commuter's perceptions of crime in  
Metrorail trains: A case study of Durban station.

By

NOKULUNGA NXELE

SUPERVISOR: DR LONDEKA PRINCESS NGUBANE

Submitted in partial fulfilment of the

Requirements for the degree of Master of Social Science

At the University of KwaZulu-Natal

School of Applied Human Sciences