



**An Exploratory Study of Women's Perceptions of Safety as Automated Teller Machine
(ATM) Users (*A select sample in eThekweni municipality, KwaZulu-Natal (KZN).*)**

by

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DECLARATION

I, Jessica Roopnarain, hereby declare that the thesis ‘Exploratory study of Women’s Perceptions of safety as Automated Teller Machine (ATM) users. (A select sample in eThekweni municipality, KwaZulu-Natal (KZN) submitted in fulfilment of the degree MA (Criminology) at the University of KwaZulu-Natal is my own independent work and has not previously been submitted for a degree at another university. In addition, I declare that all sources that I have used or quoted have been indicated and acknowledged.

Jessica Roopnarain

Date

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ABSTRACT

Women as active and equal citizens of South Africa enjoy equal access to South African banking facilities. Banks mobilise, allocate and invest much of the savings of a society and therefore, their ability to provide a safe banking environment has substantive repercussions on its expansion and sustainability. A banking facility that necessitates safety is the Automated Teller Machines (ATM) environment. Safety of ATM users (customers) is a human right and that makes it a necessity, user confidence and continued user participation.

Against this landscape, the current study sought to explore women's perceptions of safety as ATM users in the eThekweni Municipality in KwaZulu-Natal. Thus, the aim of the study was to explore a select sample of women's perceptions of safety as ATM users. The objectives of the study were to understand women's perceptions of safety as ATM users in the eThekweni municipality by making use of a quantitative research design. A survey instrument, the questionnaire was constructed and used as the data gathering tool for the study. 100 survey questionnaires were administered to participants using snowball sampling. This sampling technique was most appropriate given the sensitive nature of the study namely seeking perceptions on ATM safety. The participants were all women from the four main race groups in KwaZulu-Natal namely African, Indian, White and coloured. They represented six age categories namely from 18 to 65 years of age. Participants were recruited from ABSA, Standard, First National, Nedbank and Capitec banks.

Findings show that participants were aware of precautions to take irrespective of age, race or banking institution. First National and Standard Bank participants scored the highest in terms of agreeing with their level of awareness. In terms of feeling safe using ATM's where a security guard is present the 42 to 49 year old women had the highest responses. Further findings show that the responses in the *disagree* and *neutral* scales were particularly interesting when participants were posed with the question: "My banking institution does not need any more ATM safety measures". In the 42 to 49 year age category 17.2 % of participants believed that their banking institutions actually need more ATM safety measures followed by 15.2 % of the 34 to 41 category. The lowest response to this statement was generated from the 18-25 year category of participants. Findings also show that when participants were asked to respond to the statement "I am not afraid

to use ATM's at a well-lit, open, high traffic area” the majority responses were in the neutral and agree scales. Findings of the study revealed that women across all race groups are equally vulnerable to ATM crime or feelings of insecurity when using ATM's. Although the study makes a variety of recommendations for future research in the area, one critical recommendation is for a mixed method research design that could also inquire from participants what they consider suitable remedies for women victims of ATM crime. Here the focus should be on indirect costs of ATM crime including pain, suffering, psychological impact and the trauma experienced by the victim.

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CHAPTER 1: INTRODUCTION AND PURPOSE

1.1. Introduction

Many categories of women in South Africa have historically been denied equal rights as citizens of South Africa. It was not until the introduction of the Bill of Rights (The Constitution of the Republic of South Africa, 1996) that all women in South Africa received formal recognition as equal citizens hence equal rights. South African women were second-class citizens for many years (South African History Online, 2017). Thus, to rid some of the previous inequalities South African women supposedly enjoy some privileges (e.g. extra safety and security) that children and vulnerable groups enjoy.

Prohibition of discrimination on the grounds of gender and sex (contained in section 9 of the Constitution of the Republic of South Africa, 1996) inter alia is clearly intended to protect women. The result of section 9 leaves no doubt that no unfair discrimination based on any feature of being a woman will be tolerated. This includes discriminating against women who are victims of crime. Against Section 9 of the Constitution women victims have been prioritised in the criminal justice system. Nevertheless women as victims of crime have never gained great research visibility in some focus areas (banking) compared to others (domestic violence).

As already mentioned one well known form of victimisation is domestic violence which is gendered in nature, because of the manner in which gendered power inequalities are entrenched in South African society. Interpersonal and domestic violence against women has received much attention but, marginalised areas such as women as victims of ATM crime has been scarce. This, although South African women are variously disadvantaged because of their socio-economic status, gender and disproportionately high levels of criminal victimisation.

Their victimisation usually manifests itself physically, sexually, emotionally, financially or structurally. Most acts of interpersonal gender-based violence are committed by men against women.

While analysing gender based violence is not the aim of this study per se women's experiences of victimisation at ATM's that includes interpersonal or structural violence forms part of the discursive discourse on criminal victimisation against women at ATM's.

Women as active, equal citizens of South Africa enjoy equal access to South African banking facilities. Banks mobilize, allocate, and invest much of society's savings, so banks' ability to provide a safe banking environment has substantive repercussions on its expansion and sustainability. Banking is now brought closer to the customer. A banking facility that necessitates safety is the ATM environment. Safety of ATM users (of customers) is a human right. It is a necessary condition for user confidence and continued user participation.

When communities (banking community included) do not feel safe and live in fear, the country's economic development and the people's well-being are affected (National Development Plan, 2030). Communities are unable to achieve their social and economic potential. This is particularly so in the case of women, who are more vulnerable and less likely to achieve their potential in unsafe environments (National Development Plan, 2030). In 1996 the South African Government adopted the National Crime Prevention Strategy (NCPS). The NCPS was an integrated approach by local, provincial and national government as well as the community in an attempt to deal, not just the element of crime but include crime prevention. In shifting its approach to crime, it would seek to articulate a more homogeneous approach to dealing with diverse communities. Crime types were approached differently disaggregating the different types of crime. This would result in an equitable response to the crime problems of different communities whilst at the same time dealing differently with for instance the crime of rape and property theft (Holtman, 2007).

Almost two decades after the implementation of the NCPS The National Planning Commission, responsible for the National Development Plan - Vision for 2030 (NDP), realised the need to rethink inter-alia how safety as a core human right should be addressed. Thus, they maintain. In 2030, people in South Africa [should] feel safe and have no fear of crime at home, at school, at work and they enjoy active community life free of fear (Brand South Africa, 2016). "Safety and security are directly related to socioeconomic development and equity, affecting the development objectives of economic growth and transformation, employment creation, improved education and health outcomes, and strengthened social cohesion." (National Development Plan, 2030)

Adding to the discourse on safety, Holtman (2007) mentions that safety is not merely the absence of crime. The concept of safety in South Africa includes physical security. Holtman (2007) adds “Regardless of however uninformed or unscientific such discussions may be, crime often has serious consequences, both in terms of fear and in formal or informal responses (Holtman, 2007).

Related to the notion of crime and violence in South Africa Holtman and Domingo- Swartz, (2007) add that South Africa’s constant exposure to crime and violence, through direct victimisation and extensive, detailed daily media reports combined with rumour and anecdote fuel growing fears of crime and perceptions of increased vulnerability (Holtman and Domingo- Swartz, 2007). An unintended consequence has been lack of preparedness for the evolving nature of crime in South Africa. Also, as South Africa increasingly faces new crime trends criminals are highly organised, sophisticated and dangerous in the commission of their crimes. Sewpersad (masters dissertation, 2011) maintains that “In cases where a relatively different or “out-of-the-ordinary” crime appears in society, the police, as well as the specific affected industry (banking, retail, casino etc.), are often inadequately prepared or not prepared at all to deal with the consequences of such a ‘new or different form’ of crime.

Criminal victimisation of women in various forms has received much attention internationally and locally. Although South Africa has accrued a great body of much discursive research on crime and violence an area of scant research (mentioned previously) is female victimisation in the banking industry but more specifically as users of the Automated Teller Machines (ATM’s). Thus this research aims to add to the scholarship on women as victims of ATM crime, a field in which South African women have received little, if any, systematic consideration. This research also highlights (through literature) the obligations of banks to provide a safe environment to women who transact at ATM’s.

In addition to contributing to the scant body of existing research on the criminal victimisation of women at ATM’s this study highlights (through literature) fears of crime that have a debilitating effect on people. These fears of crime have been recognised by the World Bank (2007). This recognition has created the platform for scrutiny and attention on the subject by both media reporters and scholars over the last three decades worldwide. (World Bank Annual Report (2007).

The World Bank points out that fear of crime influences individuals to stop undertaking certain activities (for example, exercising, night entertainment) and refrain from going to selected places. The report shows that “Fear may be therefore viewed as a “quality of life” issue” (Saridakis and Sookram, 2005). Similarly, Conklin (1971) defined fear of crime as “a sense of personal security in the community”. Garofalo’s (1981) working definition (fear of crime) was “an emotional reaction characterised by a sense of danger and anxiety elicited by perceived cues in the environment that relate to some aspect of crime for the person”. More recently, Pain, et al. (2000) defined it as “the wide range of emotional and practical responses to crime and disorder which individuals and communities may take”. Similarly, a number of authors have also expressed concerns about the measurement of the fear of crime, (Farrall et al. 1997) and how this fear affects banking clients? Unfortunately, as mentioned previously, there is a caveat in this area of study. Nevertheless, the banking sector literature identifies a number of factors influencing customer satisfaction such as systems availability, fulfilment and efficiency, security and responsiveness, easiness, cost effectiveness, social benefits, functional benefits, ease of use, etc. depending on the banking technology used (Dondolo and Madinga, 2016). However the empirical gap in understanding women’s fear of crime during ATM use is unfortunate at a time when South Africa is seeing a marked increase in the use of ATMs and an increase in the economic participation of women in the formal and informal economy. Additionally, the advent of computer technology has supposedly made banking more convenient to the consumer. Banks encourage the use of electronic transfer of funds on its journey to becoming digital and is perceived to be more productive, yet safety at ATM’s are still a concern. (Standard Bank, 2011)

By the end of 2015, there were 26 000 reported ATM machines in South Africa, two percent higher than 2011. (SABRIC, 2015)

1.2. Origin of Study

The National Development Plan (Chapter 12) recommends independent context studies and opinion surveys to gather information on perceptions of safety and fear of crime among South Africans. It also recommends that these studies be facilitated by the department of community safety in each province, or the Premier. Yet studies on women as victims of crime outside of domestic and general violence is highly lacking. One such area is women as victims of ATM crime

although the media has evidenced various reports of women robbed at ATMs by means of intimidation, violence and or the threat of violence and the growing frequency of criminals targeting women (Warby, 2000). Hence in daily workplace conversations the researcher (a bank employee) further discovered not only the seriousness nature of ATM crime but also the casual approach by banking institutions and society as a whole toward the victims of such crime. Arising from the conversations (and of concern) the researcher perceived ATM crime being equated to petty crime by banking personnel specifically.

The seriousness of ATM crime is captured variously. In one particular ATM criminal offence (an incident in Bangalore) (PTI, 2013) a 38-year-old woman while transacting at an ATM was threatened, with a pistol, to withdraw a large amount of cash and hand it over to a male assailant. When she refused to comply, she was struck with a machete on the head and face and collapsed. The assailant grabbed the valuables from her bag and left. The victim went unnoticed for almost 3 hours when a passer-by noticed blood stains that led him to the victim who was unconscious. The victim spent 3 months in hospital away from work and family.

In another incident in Northdale, province of KwaZulu-Natal, a women's salary and rent payment were stolen in an ATM scam by a well-dressed man who conned the victim to expose her ATM pin and swop her ATM card which appeared to be swallowed by the ATM. All the cash was withdrawn from the account, (Bisnath, 2014).

In Kimberly three male suspects were arrested following a spate of robberies where people had withdrawn larger sums of cash at local ATMs. The robberies involved especially elderly persons, business people and women who had just withdrawn money from the ATM (Halata, 2012).

In Bloemfontein a 42 year old woman was robbed at home and held by knifepoint. She was then taken to two ATMs and forced to withdraw cash to hand over to the assailants. She was then intimidated by the threat of returning should she report the incident (Semela and Fekisi, 2014). A similar incident was recorded in the Cape Times (2007) in which two women tell of a horror taxi driver who robbed, assaulted and plundered their bank accounts in two separate incidents. The women were accosted at gun point and taken to the ATMS where the cash was withdrawn from their accounts.

In Krugersdorp, province of Gauteng, a woman who was targeted by two male ATM criminals had her entire salary stolen. After the first male used the ATM the victim attempted to use the ATM. The device indicated it was not working. She left but was followed by the first male who told her the ATM was working again. On using the ATM, it appeared as though the card was swallowed. The male engaged her further prompting her to enter her card pin. While doing this the male disappeared and a second male appeared in the queue behind the victim. By then her pin was compromised and within three minutes her entire salary was withdrawn from her account (Coetzer, 2015). These and other anecdotal information on women victims of ATM banking has demonstrated to the researcher the importance of understanding this phenomenon particularly because this is an under researched area in the field of criminology in South Africa. The reason for scant studies and literature in the field is relatively unknown.

1.2.1. Location of the study

eThekwini Municipality is located on the east coast of South Africa in the Province of KwaZulu-Natal (KZN) (See Figure 1 below). The Municipality spans an area of approximately 2555km² and is home to some 3.6 million people in 2016. It consists of a diverse society which faces various social, economic, environmental and governance challenges (eThekwini Municipality Integrated Development Plan, 2017/18). In 2001 the population of eThekwini was 3.09 million and has grown at an average annual percentage of 1.13% per annum to reach 3.44 million in 2011 (Statistics South Africa, 2016). The next Census is scheduled for 2021. In order to provide the Metros population totals in the 10 years between the Censuses there are official 5-year short term demographic forecasts for eThekwini which are undertaken by Statistics South Africa (StatsSA). The forecasts use the following demographic assumptions: fertility rate, life expectancy, mortality rates, HIV/AIDS and migration. The forecast in the table below indicates that the population of eThekwini will grow by 175 thousand between 2016 and 2020 when the population total will be 3.85 million. In addition to the short-term demographic forecasts StatsSA undertakes a Community Survey at the midpoint between Censuses and this survey estimated the 2016 eThekwini population at 3.7 million (eThekwini Municipality Integrated Development Plan, 2017/18).

Figure 1: eThekweni Municipality Map



According to StatsSA Forecast (2016), the eThekweni population is young with 63% of the population below the age of 35 years. Individuals within the 0-14 year's old group comprise 29% and the 15-34 age group 33% of the population. The 35 to 59 age group comprises 28% and those 60 and over 9%. The economically active age group from 15 to 59 years includes 62% of the population. The population dependency ratio is 52 / 100 and this indicates that 52 persons either young or old depend on 100 persons of working age between 15 and 64 years. However, as discussed in Section 1.5 on the Economy, it must be noted that when employment rates are low the economic dependency of young, old and unemployed on each working person will be higher than the population dependency rate (eThekweni Municipality Integrated Development Plan, 2017/18).

The eThekweni Municipality (EMA), like all developing world cities, is subject to high rates of immigration from rural areas and small towns in KZN, other parts of South Africa and other parts of Southern Africa. This has resulted in a rate of urbanisation and population increase that is difficult to project, with a large number of new residents requiring housing and services. The eThekweni City Density Strategy (2013) estimated that “at a growth rate of 1.1% per annum, the population of the EMA will grow to 4.4 million by 2030, an additional 775,000 people. However, global

trends indicate that a projection of 1.1% annual growth might be too low. “Cities across the world now accommodate 3.5 billion people or fifty percent of the world’s population (in Ballard, Bonnini, Robinson and Xaba, 2007). By 2050 they will accommodate 6.4 billion people or over 70% of the world’s population.” (City of Melbourne, 2010; (in Ballard, Bonnini, Robinson and Xaba, 2007) African Cities are generally dynamic and have fast-growing populations, and eThekweni is no exception with the majority of this growth happening on the urban periphery where it is easier to access land. With such rapid growth, city development will need to be significantly accelerated to adequately address this challenge. Migration of population to eThekweni is an important contributing factor to population growth (eThekweni Municipality Integrated Development Plan, 2017/18).

As cities and local governments play an integral and vital role in World Sustainability, planning for economic growth remains an increasingly important function of cities around the world. Since the late 1990s, the World Bank and the United Nations Centre for Human Settlements (UNCHS), under the banner of the Cities Alliance, have been promoting forms of long-term, collective city visioning amongst cities in poorer and transitional economies (Harris, 2002). For decades cities with a wealthier economy have been planning for economic growth by having adopted entrepreneurial initiatives and programs in an attempt to foster economic growth and a regeneration of the city. (Brenner 2004). Cities can be seen as a catalyst for change and in poorer countries around the world, it has often been the case that processes of democratisation and decentralisation have encouraged stronger city level involvement as a driver in economic development (World Bank 2000). In South Africa, the post-apartheid era has seen cities tasked with major developmental goals, including addressing economic growth in the context of globalization and managing service delivery to reduce apartheid era backlogs in poor townships. What is necessitated is a multilevel governance approach in delivering this task. To achieve a common goal for the city’s future what is fundamental necessitated globally and in South Africa are defined processes which are democratic and participatory in defining and shaping the city’s future. (Cities Alliance 2006).

The most recent round of legislation for municipalities (South Africa 2000) requires long- and medium-term citywide planning in the form of Integrated Development Plans (IDPs). This practice of long-term city visioning had been initiated by some of the major municipalities in the build up

to the unification of metropolitan urban government in 2000 (Harrison 2006). The Municipal Systems Act (No.32) of 2000 (MSA) requires that local municipal structures prepare Integrated Development Plans (IDPs) (in Ballard, Bonnin, Robinson and Xaba, 2007). The IDP serves as a tool for transforming local governments towards facilitation and management of development within their areas of jurisdiction. The MSA identifies the IDP a key component in entrenching developmental local government principles. In conforming to the Act's requirements, the eThekweni Municipal Council has delegated the authority to the Municipal Manager to prepare the IDP.

The Municipal Finance Management Act (Act no. 56 of 2003) secures sound and sustainable management of the financial affairs of the municipality and other institutions in the local spheres of government (in Ballard, Bonnin, Robinson and Xaba, 2007). It does this by ensuring that its developmental programmes are aligned to its budget, and in so doing eThekweni Municipality, through its integrated development planning process, therefore delivers in accordance with the community needs and priorities, whilst committing to the budgetary programmes as enacted by the Auditor- General.

eThekweni Municipality's commitment to developing a "caring and liveable city" will be the focal point of the 2017/18 IDP, with a specific emphasis on the alignment of the Municipal Vision, strategy and implementation. The focus of the 2017/18– 2022/23 IDP is on building a more inclusive developmental local government that would translate the Municipality's vision into action.

The legislation requires, inter alia, that an integrated development plan reflect:

- (a) The long-term vision of the municipal council is a sustainable long-term development plan of the municipality with a focus on the municipality's most critical development and internal transformation needs;
- (b) The assessment of the current rate of development in the municipality must be completed, focussing on the existing level of development in the municipality, which must include an identification of communities which do not have access to basic municipal services;
- (c) The council's development priorities and objectives for its elected term, including its local economic development aims and its internal transformation needs (South Africa, 2000).

Stemming from the municipal vision by way of the Integrated Development Plan, municipal governments in South Africa are required to produce medium-term and long-term statements of their plans for development. The legislation is clear that the process cannot be done in isolation of the communities, as these communities would understand the dire needs in the community. As such a participatory process is advocated allowing communities to identify priorities for development. This participative process lends itself to a fair and democratic process which forms the bases that is central to these new development planning practices. Not only is participation a requirement of their preparation, but they have emerged with the creation of democratic local government as an important tool for meeting the expectations of the electorate (Ballard, *et al.* 2016). The eThekweni municipality in Durban, in line with the development planning process strategically implemented a framework to include a long-term view and a medium-term view. This process would allow for sustainable planning whilst addressing the immediate priorities in the municipality. In November 2002, after a protractive consultative and participative process with the community a 20-year broad based Long-term Development Framework was created. The Medium-Term Development Framework was adopted in June 2003 with the view of a more detailed action plan. The plan would be a more operational and strategic plan, to provide a more detailed and focused framework for the council's activities over a 5-year period. The consultative process of ward-based consultation informed the assessment of citizens' needs, and contributed to the formulation of the council's priorities for the period. The process, which informed the identification of the city's development ambitions for the next 5 to 20 years, offers an important window into the nature of democracy in this city. For not only did it involve substantial processes of participation, widening the decision-making process beyond the formal realm of politicians and officials, it also highlights the range of institutional and informal processes of representation which are at work in cities in a democratic South Africa, and which are substantially shaping the kind of democracy (and the kind of development) which is emerging here.

The IDP process not only collects information on what communities want but also tries to temper expectations so that projects which the city defines as unfeasible are not lodged as realistic demands by the community. This is, therefore, not a one-way flow of information but rather a complex exchange in which the city also instructs its citizens about what they might expect from the city and how they might participate in governance. If nothing else, the very fact of the local government being organised into a single utility is relatively new and has to be 'taught' to people.

With a history of small scale, disparate and racially separate local government authorities – the holistic management of the city only began in 2000 with the formation of the united eThekwin Metro. What was apparent to IDP Facilitators when engaging with communities was that the focus was more on the medium term and not on a long- term view. The participants of the community where more focused, on problems that directly affected them. A further challenge was that their priorities where limited to their own environment and less on developments that did not directly affect them. The participatory process allowed the communities to become more integral in their city by being involved in all the wider municipality problems and challenges. This also created a different mindset encouraging communities to think about metro-wide problems, the participatory process conveys to them something of the city’s own decision-making predicaments.

In terms of the Current Development Challenges identified by the IDP 2017/2018 report significant strides have been made to address the key development challenges in the Municipality. While significant progress has been made in all areas, there is still some distance to go towards addressing the following challenges:

- High rates of unemployment and low economic growth;
- High levels of poverty;
- Low levels of skills development and literacy;
- Limited access to basic household and community services;
- Increased incidents of HIV/AIDS and communicable diseases;
- Loss of Natural Capital;
- Unsustainable developmental practises
- High levels of crime and risk;
- Ensuring adequate energy and water supply;
- Ensuring food security;
- Infrastructure degradation;
- Climate change;
- Ensuring financial sustainability;
- Ineffectiveness and inefficiency of inward-looking local government still prevalent in the Municipality (eThekwin Municipality Integrated Development Plan, 2017/18).

1.3. Rationale for the study

As demonstrated in the media reports (see above) ATM crimes are indeed real problems both nationally and internationally. These reports indicate women are robbed at ATMs by means of intimidation, violence and or the threat of violence (Warby, 2000). Similar (to those already mentioned) media results in United States (Goldeen, 2015), (McLaughlin, 2013), (Turlock, 2016) Europe (ITV, 2016), Canada (Mayoff, 2016) and India (NDTV, 2015), (PTI, 2013) show women victims being attacked with dangerous weapons including machetes, knives and firearms at the ATM premises and surrounds.

However Haden (2016) mentions that media results in Africa and South Africa evidence women being robbed, she understands that the crime is more of ATM card swapping and not of a violent threat to life (Haden, 2016). However what Haden fails to highlight is that even card swapping has the potential of psychological harm on the victim as it is an invasion of personal space and privacy which broadly speaking is emotional violence. It is not uncommon for this aspect of victimisation to be treated more casually usually because of the absence of physical harm.

Nonetheless even in the face of the limited recognition of the importance of ATM crime, the CEO of The South African Banking Risk Information Centre (SABRIC) a Non Profit Company formed by the four major South African Banks purported, “Transacting at ATM’s is quick and convenient, but unfortunately criminals exploit this facility for their own fraudulent purposes. She adds “Criminals use various ways to manipulate and distract ATM users in order to gain access to their bankcards and PIN’s, and ultimately, steal their money SABRIC (2002). Similarly security companies have recorded ATM criminal acts around South Africa. For example Blue Security, a privately owned security company in KwaZulu Natal, recorded two incidences of women targeted by ATM thieves in Durban North and Waterfall, province of KwaZulu Natal. In the Durban North incident a women was robbed of her bank card when the robber approached from behind and pressed the cancel button and fled with the bank card. In the incident in Waterfall a woman’s card was swapped and the criminal withdrew cash from an account at another ATM before she could stop the card, (Blue Security, 2016).

Other available international studies (although limited) focus on the ATM and attempts to reduce its crime magnet, (Guerette and Clark, 2003) with specific emphasis on the Security and Safety

standards required at the ATM. For example in a supporting stance in Central America (Solórzano, 2013), safety standards were implemented for banks to comply with that were regulated by the Honduran Banking and Insurance National Commission. Thus, the user's safety had become the central figure in defining the security and safety standards (International Business, 2013) (PTI, 2013), (DeYoung, 1995), in his study too focused on the security and safety standards of ATMs.

Literature reveals that for effective adherence to security standards there must be some regulation. South Africa is lacking in that it has no legal framework on ATM safety and security measures hence there is no compliance. (International Business, 2013); (PTI, 2013); (DeYoung, 1995) Although the banking industry does focus on user education, safety is usually visible only on banks' websites and the media. The large majority of South Africans either do not have access to or do not access these websites rendering this mode of operation quite meaningless.

In addition, although the focus of the Banking institutions and SABRIC is on educating users there is a lack of specific focus aimed at more vulnerable groups like women. Hence it would appear as though men and women are perceived as one and the same. Specific focus on educating women users could be in the form of additional caution that women should observe when utilising an ATM. This seems particularly necessary also in light of the findings of DeYoung, (1995) and Merican, (1997) that revealed the courts reluctance, to reassign the duty of protecting citizens, from the government to the private sector with respect to crime and bank liability of duty of care. Further their findings showed if duty of care existed, it did not mean automatic liability of the bank. The approach was to prevent banks from being unduly burdened while still encouraging safety at ATMs.

Penzler's, (2009) research (United States of America) showed that a public – private partnership was successful in halting crime and reducing and almost eliminating ATM incidents. The partnership applied techniques of consultation, research and information sharing amongst the public and private sectors which contributed to its success. In South Africa however presently, there are no formulated and agreed guidelines or legislation with regard to minimum security and safety standards at ATMs that need to be complied with by Banks. This lack of onus could be viewed as gap in the South African Banking Industry.

1.4. Aim and objectives

1.4.1. Objectives

The aim of the study is to measure women's perceptions of safety at ATM's. In pursuit of the aim of this study the objectives are to:

- Measure women's perceptions of safety as ATM users in the eThekweni municipality;
- Make recommendations on how women's vulnerability as ATM users can be managed based on any identified trends.

1.4.2. Research questions to be asked

- How safe do women feel when using ATM banking facilities?
- What is the difference in Women's perception of ATM safety between four race groups?
- What is the difference in Women's perception of ATM safety between banking institutions?

1.5. Value of the research

In the South African Banking system ATMs are identified as the customer's preferred banking channel due to accessibility in terms of 24hr availability and location. In other words users can do banking anytime and anywhere.

This convenience however has been undermined by the inevitable criminal element associated with it. According to the Banking Association of South Africa, ATMs have become and continue to be criminal magnets for fraud, card swopping, card skimming, cash theft and robbery (Banking Association of South Africa, 2016). Inevitably ATMs, by virtue of being a cash device, have become a criminal magnet. (Banking Association of South Africa, 2016)

Although limited research exists on ATM criminals, fraudsters and ATM device safety standards there is an even greater gap in research on victim's (women) perspectives as vulnerable targets at ATM's. The study aims to fill this knowledge gap.

This study's value is in its focus on women victims who have not been the focus of prior research. Hence it will provide baseline data that could be considered by relevant stakeholders and role-

players in society. The study thus has the further potential to develop a better understanding into the required safety and security measures pertaining to ATM device and geographical placement according to women's needs identified through this study.

The findings of the study will be disseminated to both the University of KwaZulu-Natal and SABRIC via Standard Bank. The findings may be used by the bank to inform and test security and safety measures in place or required at ATM devices in order to protect their women customer base. The research study may also be of value for future research in terms of the baseline data that it will produce.

1.6. Summary of research methods

The research design and methods used in the present study will be discussed fully in Chapter 4 of the dissertation. A summary of the design and methods is nevertheless warranted as part of the introductory chapter.

The means of enquiry and approach were Quantitative. The survey design in the form of questionnaires was used for this study and administered to a sample from a specific population of women ATM users in the eThekweni municipality. The survey involved the administration of a Questionnaire which sought to obtain data on current feelings of safety and recommendations for safer ATM facilities. Surveys were easier to administer. It assured confidentiality and was effective in providing information in a relatively brief time period at low cost to the researcher (Robson, 1993).

The researcher chose snowball sampling within a non-probability sampling frame as the current study is exploratory in that the phenomenon being investigated (women's perceptions of safety during ATM use) has not adequately been researched in the field of criminological research (Creswell, 2007). This sampling frame further allowed the researcher to include participants with specific information on the phenomenon but on a voluntary basis. In employing this type of sampling in addition to it being cheaper and time efficient, rules and procedures were easier to implement. Ethical considerations such as voluntary participation, informed consent, privacy and anonymity are discussed in greater detail in chapter 4.

1.7. Definition of concepts

The key concepts used in the study are defined below. The concepts are developed from the sources indicated in brackets.

- **Automated Teller Machine (ATM)** - A machine that you use to withdraw cash and to access other banking services including for example balance enquiries and prepaid purchases as outline in the Code of Banking Practice (2011)
- **ATM crime** – according to the Banking Association of South Africa (2018) ATM's have made it possible for criminals to devise various scams such as card skimming, card swopping, ATM shoulder surfing and card trapping in ATM's
- **Women victims:** In terms of the Constitution of the Republic of South Africa, (2016) Section 9 – Equality it says: “(3) The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth.”
- **Duty of care:** Duty of care is linked to the Corporate Social Responsibility of companies in projects such as education, safety, and the environment, among others. (Flores-Araoz, 2011)

1.8. Structure and layout of report

The introductory chapter introduces readers to the study and its purpose. It provides an overview and scope of the problem studied. It also provides the origin, rationale, aim and objectives, and value of the research. In addition, it provides a brief summary of the research design and methods and provides clarification on some concepts relevant to the study. The second chapter presents the literature reviewed for this research study. The chapter highlights the evolution of banking, its accessibility and availability by increasingly deploying digitally enhanced ATM devices into the landscape year on year. It looks at minimum safety and security measures for users of the ATM. It further provides evidence of South African and non-South African research on ATM crime increasing and women being amongst the vulnerable target of criminals.

Chapter 3 presents the theories most suited in understanding the phenomenon being studied namely women's perceptions of safety when using ATM's. The study combines the Routine Activity Theory and Lifestyle Exposure Theory. Chapter 4 presents the research methodology in which the research design and method are presented. The Research findings follow in Chapter 5. The results are presented interpreted and integrated with relevant literature. Attention is drawn to key aspects of the findings and significant associations are pointed out. Results that are interpreted are also compared to the available evidence previously provided in the literature review. Anomalies are noted, connections are drawn and justification for the application of the theoretical model is provided. Chapter 6 presents recommendations based on the findings of the study inter alia grounds for future research. The thesis concludes with the relevant reference list and appendixes.

1.9. Summary

There are many reasons, explanations and elements at play when looking at ATM Crime, all of which should be investigated and compared. Anomalies and deviations must be discussed and debated. The perspectives of authors of previous studies must be taken into account, as these perspectives aid in better understanding the phenomenon. Understanding perceptions of safety of women when using ATM's is the focus of the present study. Chapter 2 will present the literature reviewed for the purpose of this study.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

The ATM was born almost 50 years ago, in 1967. For many, this was the first tangible evidence that retail banking was changing; the introduction of the ATM marked the dawn of contemporary digital banking. Several lay claim to the invention of the first cash machine as the research was conducted in parallel, including John Shepherd-Barron and James Goodfellow in the U.K.; Don Wetzel and Luther Simjian in the U.S.; and even engineering companies like De La Rue, Speytec-Burroughs, Asea-Metior, and Omron Tateisi. But the ATM is a complex technology. The first cash machine seems to have been deployed in Japan in the mid-1960s, according to a *Pacific Stars and Stripes* account at the time, but little has been published about it since. The most successful early deployments took place in Europe, where a need was identified for after-hours cash availability. This forced bankers to solicit engineers to find a solution to the problem. Against the backdrop of increasing unionization and rising labor costs, engineers had to develop a solution for after-hours cash distribution. This resulted in three independent efforts, each of which entered use in 1967: the Bankomat in Sweden, and the Barclaycash and Chubb MD2 in the U.K. On this day in 1969, America's first automatic teller machine (ATM) made its public debut, dispensing cash to customers at Chemical Bank in Rockville Center, New York. Since then ATMs have evolved and continue to revolutionize the banking industry. The availability of ATMS by virtue of number deployed and operating hours, proceeded to eliminate the need to visit a bank to conduct basic financial transactions. In just over a decade, by the 1980s, these money machines became widely popular and handled many of the functions previously performed by human tellers, such as check deposits and money transfers between accounts. In 1981, Standard Bank group was the first commercial bank to introduce the ATM in South Africa. Today, ATMs are no longer just a money machine and technologically enhanced with banking features and programs encouraging self-service banking and as a result have become an indispensable device as cell phones and e-mails are to most people.

The use of the Automatic Teller Machine as a banking platform entrenched itself in South African banking and its capabilities are continually evolving. Currently the South African banking system is one if not the best in the world. South African Banks rated first and second in the top ten global

banks according to 2016 Laffertys Bank Ratings (Business Tech, 2016). With ATMs being the customers preferred channel due to accessibility in terms of 24 hr. availability and location, users can do banking anytime and anywhere.

Since 1970 the global growth of ATM has spawned across all continents. In line with its global growth the ATM Industry Association or ATMIA was established in 1997 in the USA. It is a global non-profit organization servicing a worldwide ATM industry comprising 3 million ATMS.

ATMIA has done global research on ATMS and best practices in line with global trends. As a member of ATMIA these practices are shared with member organisations which are not limited to banks. ATMIA shares innovation and security techniques, standards and hosts an annual conference for all member delegates. It does global studies which are shared amongst its forum members. ATMIA like the South African SABRIC non-profit organisation represents its members with regulators and approaches legislature directly.

The primary function of the ATM is cash, be it a deposit or withdrawal, and as long as there is a cash society there will be a need for ATMs as a convenient banking channel. Consequently as long as there is cash there will be a criminal magnet attracted to it.

As discussed in chapter one media platforms and literature informs that ATM crime against the user, is indeed prevalent in KZN, in South Africa and in the world and that women are amongst the vulnerable targets of ATM crime.

2.2. The Banking Industry and migration to alternate channels of banking

The Automated Teller Machine (ATM) was designed to create self-service banking enabling customers of a financial institution to perform financial transactions without the use of a bank teller. Automated Teller Machines are electronic devices making banking that much easier to the end user. The convenience of not having to go into a bank and having banking facilities at your doorstep. Originally developed as cash dispensers, ATMs have evolved to include many other bank related functions and is continually evolving to enhance self-service banking capability. The ATM has become a bridge to blend the digital and physical channels of banking advancing financial inclusion of the unbanked, creating a connected customer experience.

There are approximately 3 million ATMS globally. In South Africa the introduction of the Financial Sector Charter (2004) formalised the need to make banking more accessible to all South Africans, setting in place specific targets for the financial services industry. The Financial Sector Charter is a transformation charter in terms of the Broad-based Black Economic Empowerment [BBBEE] Act [Act 53 of 2003].

The Financial Sector Charter aimed to make a significant contribution towards economic growth, development, empowerment and reduction of inequalities and poverty in our society. The initiatives envisaged through the Charter would promote growth in the financial sector.

In accordance with the Charter, all South African banks needed to provide banking facilities within a 20km radius of low income communities. Banks committed themselves to improve access by the end of 2008 with the use of ATMS and other portable banking structures. Refer to Financial Services Charter (2004), para 8 Access to Financial Services.

In the South African banking system ATMs are identified as the customer's preferred electronic banking channel due to accessibility in terms of 24 hr. availability and location, users can do banking anytime and anywhere.

2.3. ATM crime as a criminal offence

In understanding what makes up ATM crime and makes it punishable by law the criminal act itself must be categorized and defined.

The European ATM Crime Report 2014 (European ATM Security, 2014) was compiled by the European ATM Security Team (EAST) to gather and provide information to the European ATM industry and to facilitate effective representation of ATM related security issues. EAST was founded in 2004 as a non-profit organization and EAST National members represent 29 countries.

The latest European ATM Crime Report 2014 collated information and statistics from 21 European States. In looking at the ATM crime definitions two broad categories are referenced ATM related fraud attacks and ATM related physical attacks.

Under the category ATM related fraud attacks the types of crime references are Card Skimming, Card Trapping, Other Fraud – Cash Trapping, Other fraud – Transaction reversal fraud, ATM

Malware - 'Cash out' attacks,/jackpotting and ATM Malware – Card/Pin data compromise (European ATM Security, 2014).

Card Skimming retains the same definition as BASA of cards being cloned. Card Trapping is where the card is physically trapped at the ATM and pin compromised. Other fraud such as Cash Trapping is where the physical cash is trapped by a device attached to the ATM. Transactional Reversal Fraud is where an error condition is created and cash will not dispense. The transaction is reversed and due to the device attached to the ATM the cash goes to the criminal. ATM Malware such as 'Cash out' attacks,/jackpotting takes control of the cash dispense function. ATM Malware-such as Card/Pin data intercepts the card and pin data at the ATM allowing the criminal to create a counterfeit card. In the category ATM Related Physical Attacks the type of crime referenced is Ram/Raids/Burglary, Robbery and Other.

Ram Raids is ripping out the ATM whereas burglary is attacking the safe on site. Robbery is when the cash servicing crew is attacked and Other is Robbery (other than during cash replenishment), such as vandalism or cash trapping at the ATM shutter.

The European ATM crime statistics does not report on user physical robbery but groups incidents under other.

South African Banking and Risk Intelligence Centre (SABRIC) established in 2002 by the South African Banks was established to support the banking industry in the combatting of crime. SABRIC annual results recorded at the end of 2015, indicated an industry increase in ATM crime. (SABRIC, 2015).

The criminal activity affecting ATM users are card swapping, card skimming, cash theft and robbery according to the Banking Association of South Africa (BASA). (Banking Association South Africa, 2016). Card swapping refers to fraudulent transactions performed on a validly issued debit or credit card that has been stolen from a legitimate owner. Card Skimming or card cloning uses a Card Skimming device to fraudulently copy bank customer details stored on the magnetic strip on a debit or credit card. Whenever a user presents his/her card for payment he/she runs the risk of being skimmed. According to BASA the majority of skimming incidences in South Africa are recorded around ATMs and, to a lesser extent, at retail merchants when bank cards are presented for payments (Banking Association of South Africa, 2018) The customer and card

information stolen with skimming devices is often used to manufacture counterfeit cards which criminals use to make fraudulent transactions on a victim's account. Cash theft and Robberies occur when users are on their way to deposit money at the bank or ATM or after they have made large cash withdrawals. According to BASA, perpetrators keep changing their approach to trick their victims and it remains difficult for the banking industry because perpetrators prey on the vulnerabilities of bank customers and do not target banking systems per se.

Similar to the global village, SABRIC does not report on User physical robbery but groups incidences under Other. Reliance is placed on the incident to be recorded in the South African Police Statistics under Robbery, Theft and common assault.

2.3.1. Legislation and collation of ATM crime statistics

In current South African law the common law crime of robbery has developed to such an extent outside of Roman-Dutch law that it presently may be defined as theft of property by intentionally using violence or threats of violence to induce submission to the taking of it from another (Burchell, 2005)

The crime of theft is defined as an unlawful and intentional appropriation of a movable corporeal property (Snyman, 2008). According to the Constitution (1996) the fundamental values which are protected by the existence of the crime of robbery and the crime of theft are the victims right to human dignity, privacy, freedom and the security of person and property. All these values warrant protection and thus the crime of robbery and the crime of theft is justified in South African law. (Joubert, 2010).

The 2014/2015 Victims of Crime Survey, released by Statistics South Africa, raised several issues related to public perceptions regarding the incidence and impact of serious crime, including, the underreporting of crime to the SAPS, indicating that violent crime was more likely to be reported than property-related crime, but proposing that the measurement of the extent of crime is important.

National crime statistics for South Africa have been provided since 1994[1] in line with the broad objectives of the National Crime Prevention Strategy, formally adopted in 1996, which prioritized the “gathering [of] reliable crime information” together with the parallel development of an

“effective communications strategy” based on such information which would “properly [inform] public opinion in the fight against crime,” (Africa Check, 2017). The crime statistics report is issued annually in September.

In referencing the Crime Statistics in South Africa the noise exists in the under reporting of crime to SAPS and the definitions used to classify a case. Some definitions stem from common law and others are defined in the Criminal Procedure Act 51 of 1977.

The annual SAPS crime statistics report (See Figure 2a and 2b below) tends to focus on what it terms “serious crime”. (South African Police Service Crime Statistics, 2015_2016). How these are broken down by SAPS tends to differ slightly with each annual report which has added to confusion and uncertainty about crime trends however these crimes can broadly be divided into:

Crimes against a person is generally referred to as “contact crime” where a person or people are injured/harmed or threatened with injury/harm during the commission of a crime. A further sub-category of “contact-related crime” is used for violent crimes committed against property with the intention of causing damage to a person, for example arson or malicious damage to property (See Figures 2a and 2b below).

Crimes against property refer to crimes that occur in the absence of a victim, or where the victim is unaware of the crime at the time (i.e. where no person is directly or immediately harmed or threatened during the commission of a crime) for example theft of or from an unattended vehicle. Other serious crimes include commercial and financial crimes which range from large-scale fraud and corruption to small-scale incidents such as shoplifting.

Crime detected by police action are crimes that are not reported by the public but detected through direct police action such as roadblocks and SAPS intelligence operations. Crimes under this category include the illegal possession of firearms, DUI or driving under the influence (of drugs or alcohol); and the use, possession or trade of illegal drugs.

The definitions of crimes used for compiling stats include, Common robbery which is the unlawful and intentional forceful removal and appropriation of movable tangible property belonging to another. The decisive factor is the use of force or violence

Robbery with aggravating circumstances is the unlawful and intentional forceful removal and appropriation in aggravating circumstances of movable tangible property belonging to another. These cases are coded with the use of a firearm or with a weapon other than a firearm.

ATM crime against the user in terms of recording is wide and can fall under the crime of Common Robbery or robbery with aggravating circumstances. Coding for statistics collection pertaining to ATM crime against the user is not currently present hence the magnitude or insignificance of the crime cannot be understood. Whereas SABRIC data collection can supplement Crime Stats SA, SABRIC data is not aligned with SAPS data (South African Police Service Crime Statistics, 2015_2016)

Figure 2.a: Crime Stats SA

KWAZULU-NATAL CRIME FIGURES: APRIL – MARCH 2006/2007 TO 2015/2016

CRIME CATEGORY	April to March										Case Difference	% Change
	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016		
CONTACT CRIMES (CRIMES AGAINST THE PERSON)												
Murder	4 984	4 686	4 737	4 214	3 740	3 418	3 623	3 616	3 810	3 929	119	3.1%
Total sexual offences	11 516	11 129	13 058	12 980	12 480	11 034	10 964	9 889	9 079	8 947	-132	-1.5%
Attempted murder	5 188	4 897	4 882	4 591	3 894	3 643	3 827	3 835	3 918	4 041	123	3.1%
Assault with the intent to inflict grievous bodily harm	30 638	30 365	29 958	30 723	30 491	29 504	28 832	28 982	29 201	28 665	-536	-1.8%
Common assault	31 488	29 051	29 691	32 726	32 133	31 841	30 087	26 307	24 011	23 703	-308	-1.3%
Robbery with aggravating circumstances	26 121	24 186	25 779	23 152	19 513	18 417	19 923	20 957	20 881	21 061	180	0.9%
Common robbery	10 532	9 156	8 498	7 919	7 273	7 586	8 188	8 397	7 857	7 524	-333	-4.2%
Total contact crimes (crimes against the person)	120 447	113 470	116 603	116 305	109 524	105 443	105 444	101 983	98 757	97 870	-887	-0.9%
CONTACT-RELATED CRIMES												
Arson	1 226	1 259	1 147	1 159	1 093	1 030	946	896	854	825	-29	-3.4%
Malicious damage to property	17 935	16 686	16 085	16 534	16 361	15 394	15 670	14 954	14 605	14 709	104	0.7%
Total contact-related crimes	19 161	17 945	17 232	17 693	17 454	16 424	16 616	15 850	15 459	15 534	75	0.5%
PROPERTY-RELATED CRIMES												
Burglary at non-residential premises	9 417	10 187	11 149	11 295	10 968	10 944	11 954	11 194	11 032	11 656	624	5.7%
Burglary at residential premises	39 486	36 898	37 515	40 231	39 439	41 010	45 404	43 969	43 274	42 429	-845	-2.0%
Theft of motor vehicle and motorcycle	14 031	12 152	12 080	11 404	10 530	10 059	9 738	8 674	8 404	8 673	269	3.2%
Theft out of or from motor vehicle	15 552	12 740	12 915	14 175	15 886	15 912	18 014	18 614	18 148	17 896	-252	-1.4%
Stock-theft	6 794	6 884	6 652	6 927	6 276	6 508	6 018	5 754	5 956	5 731	-225	-3.8%
Total property-related crimes	85 280	78 861	80 311	84 032	83 099	84 433	91 128	88 205	86 814	86 385	-429	-0.5%

Figure 2.b: Crime Stats SA

CRIME CATEGORY	April to March										Case Difference	% Change
	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016		
OTHER SERIOUS CRIMES												
All theft not mentioned elsewhere	50 046	46 455	48 283	46 077	49 588	52 467	50 361	49 846	47 622	43 573	-4 049	-8.5%
Commercial crime	10 366	10 467	12 665	13 452	14 985	13 375	14 226	12 431	11 227	11 395	168	1.5%
Shoplifting	10 446	10 635	12 744	15 399	12 811	12 399	13 014	13 378	14 118	13 648	-470	-3.3%
Total other serious crimes	70 858	67 557	73 692	74 928	77 384	78 241	77 601	75 655	72 967	68 616	-4 351	-6.0%
17 serious crimes	295 695	277 833	287 838	292 958	287 461	284 541	290 789	281 693	273 997	268 405	-5 592	-2.0%
CRIME DETECTED AS A RESULT OF POLICE ACTION												
Illegal possession of firearms and ammunition	4 607	4 315	4 231	4 964	5 067	4 692	4 444	4 586	4 081	3 908	-173	-4.2%
Drug-related crime	26 222	24 096	23 817	28 692	32 454	37 414	42 167	45 950	47 377	46 354	-1 023	-2.2%
Driving under the influence of alcohol or drugs	9 780	12 592	12 835	11 933	10 107	12 866	15 109	12 595	11 702	12 052	350	3.0%
Sexual offences: Dependent on police action						935	1 188	1 765	2 258	2 561	303	13.6%
Total crime detected as a result of police action	40 609	41 003	40 883	45 589	47 628	55 907	62 908	64 896	65 418	64 875	-543	-0.8%
SUBCATEGORIES OF AGGRAVATED ROBBERY												
Carjacking	3 544	3 876	4 049	3 710	2 595	2 218	2 413	2 262	2 190	2 493	303	13.8%
Truck hijacking	85	133	133	127	94	64	82	46	63	71	8	12.7%
Robbery of cash in transit	121	100	103	80	48	25	20	37	18	21	3	16.7%
Bank robbery	11	20	12	2	1	1	2	0	0	0	0	0 cases
Robbery at residential premises	2 666	3 479	4 601	4 580	3 998	3 751	4 119	4 099	3 958	4 082	124	3.1%
Robbery at non-residential premises	996	1 922	2 494	2 065	1 937	1 909	2 347	2 696	2 750	2 825	75	2.7%

2.4. The Study of ATM Crime in Africa

An interesting and relevant study in Nigeria focussing on women victim's perception of ATM's found many victims were alone when robbed. A further finding of the study showed the victims having a fear of being victims of ATM crime again and fear of perceived threat (Adapoju and Alhassan, 2010). Koomen, Visser and Staple, (2000) found that heightened media exposure on violence associated with robberies at the ATM make women more fearful than men.

Ogbuji *et al.*, (2012) and Tade and Adeniyi, (2013) analysed the Negative Effects of the Automated Teller Machine (ATM) as a Channel For Delivering Banking Services in Nigeria. Their study researched the socio-demographic profile of ATM users, the profile of typical ATM fraudsters, effects of ATM fraud on the life chances of the victims and strategies used by fraudsters to defraud. Some of their findings spoke to emotions generated in reaction to ATM fraud, and its effects on social relations. The findings further addressed the implications of ATM fraud on electronic payments systems in Nigeria.

2.4.1. Nature and extent of ATM crime on women users.

As already mentioned media evidences women who are robbed at the ATM are subjected to further crime, assaulted, kidnapped, taken hostage, raped and or sexually assaulted (Turlock, 2016). This illustrates that the criminal act that victims encounter is lengthened by not just the time taken to get the cash from the ATM device but the subsequent further potential criminal acts that could flow from the initial crime.

In “The Hidden politics of ATM Crime” (Madigan, 2016) victims, especially women, with small children, are kidnapped and taken hostage whereby they are coerced to withdraw money from the ATM and held until all the cash is withdrawn. Whereas this evidences that ATM crime may not necessarily start at the ATM media referencing indicates otherwise. (ABC NEWS, 2015). One such example is evidenced by NBC4i (2017) where women are not just attacked at an ATM in isolation although this is more frequent. This report claimed that in one particular incident while a woman was being robbed at an ATM others watched and failed to stop or intervene on the attack.

2.4.2. Contributory Factors to ATM Crime.

What contributory factors make the ATM a haven from criminals? To give some clarity to this question, crime by environmental design (Zahm, 2007) is appropriate. In the robbery at automated teller machines guide No.8. Center for Problem-Oriented Policing (Scott, (2001) maintains that contributory factors included attractive locations and the environment.

Thus Scott adds that attractive locations for robbery increase success rates of robbery. Some locations are desirable by virtue of its placement and position. These spaces may be isolated, lack security and offer ease of escape, fleeing. Hence De Sager (2002) mentions that experts argue that the best way to prevent crime at ATMs is to pay attention to the three Ls namely lighting, landscape, and location.

Prenzler, (2009) argues that the lack of security measures decreases the risk of detection making the environment more attractive. However Kole and Minnaar reporting on Fennelly’s (2004: 341) study on the use of CCTV cameras state “if the CCTV camera surveillance systems’ monitors (in a control room) are not watched, somebody will always end up playing only a reactive role but

when somebody is continuously watching the CCTV systems monitors (24/7) it becomes a proactive security system and hence an interactive security (I-CCTV). Fennelly also says that the person monitoring the CCTV system should have a means of communication with all other stakeholders, (e.g. two-way radios, monitoring stations etc.).” He further maintains inappropriate action or intervention to violence and crime decreases the likelihood of being arrested making the perceived risk higher to the public and conversely a perceived lower risk for the perpetrator. In addition to the high levels of crime in the vicinity (of ATM’s), unemployment or high levels of substance abuse increases likelihood of targeting. Thus the location of ATM’s is critical in ensuring the user does not become a suitable target. The positioning of an ATM has to be considered from the users’ safety perspective and not just convenience. Some of the variables in understanding what makes a location a risk to the user is routine behaviour and absence of guardianship. The convergence of a likely offender and suitable target in the absence of guardianship contributes to the opportunity for crime. This is mirrored to the Routine Activity Theory to be discussed further in Chapter 3.

In a study by IFSEC Global, (2016) the researchers claimed that in the presence of legitimate distractions vulnerability of victims will increase. Such distractions in the form of using a cellphone device, being accompanied by a child, being a tourist heighten the risk and makes one an attractive target. Perpetuity Research and Consultancy International (PRCI) was tasked to interview six ATM crime offenders to build greater understanding of offenders’ experiences of committing such crime, and to highlight decisions that inform these offences. The six interviewees admitted committing nearly 100 ATM crimes. Many offenders noted that they often selected their victims based on their appearance, predominantly well-dressed individuals and often women who appeared less threatening (IFSEC Global, 2016). An economy poised for a recession will always be a contributor to economic crime which makes the ATM user susceptible to becoming a victim for financial gain. The effects of a recession speaks to unemployment together with a high inflation and taxed economy. A likely offender is less likely to commit an offence if they could legitimately attain their goals.

2.4.3. Social and Economic Effects of ATM Crime on Victims

ATM crime in general has a profound impact on its victims. In understanding the economic and social cost of crime same can be correlated to the impact on society. ATM crime is not limited to the single offence of robbery but could, as evidenced in media reports and cases, evolve to offences of kidnapping, assault and rape (NBC4i, 2017).

The higher the offence the greater the impact to the victim and society. The total cost of crime will be detailed in a latter section in Chapter two. Brand and Price, (2000) point out two broad categories of impact namely economic and social. They clarify that in a simple differentiation of same the economic loss pertains to a financial, quantifiable monetary loss and social loss is the intangible impact cost on the victim and society

Nonetheless Brand and Price maintain that the economic impact and social impact cannot be looked at simply by distinguishing tangible and intangible costs. The concern for them is society's focus on economic costs (because it is easier) and disregarding social costs such as psychological distress, fear, anxiety, physical and emotional distress to the detriment of making informed decisions on the impact of crime.

These researchers also comment on a category known as opportunity cost. This concept relates to when a crime is prevented the resources that remain are available for alternate uses. This could be linked to providing support to those who have undergone emotional suffering to reduce any fear of crime that compromises their lifestyle through individual behaviour change. (Brand and Price, 2000).

An example of the social costs that Brand and Price refer to is resident in an incident in Bangalore (PTI, 2016) where a 44 year old woman (an employee of the Corporation Bank was attacked with a machete at the ATM. The victim was left bleeding profusely behind closed shutters. The cash, drawn for her daughter's birthday party, and cell phone were stolen. The grievous bodily harm (with the machete) left her with a fractured skull and bone penetration into the brain leading to partial paralysis. The victim took almost a year to recover affecting economic productivity. This incident further corroborates that the severity of the crime cannot be looked at in isolation, either economic or social, in terms of its impact to the victim and society as a whole. Turlock, (2016)

adds that women victims of ATM crime is not limited to the crime perpetrated at the ATM but the potential for more severe offences of assault, kidnapping and sexual offences.

2.4.4. History of ATM in South African Banking Sector

Just over 30 years ago the ATM was introduced in South Africa. It is claimed that Standard Bank Group was the first of the commercial banks to introduce the Autobank ATM in 1981(Standard Bank Team. 2011). Since its introduction the ATM in South Africa has evolved to more than what it was ever intended making the ATM device a digital teller. It continues to evolve in line with online banking in line with the banking sector's strategy of migration of customers from branch infrastructure to digital solutions.

Customers making this shift are users of the bank. According to the 2011 census population data 48.2% males 51.7% of females make up the South African population. Thus Mathonsi, (2013) purports that these statistics evidence the need to increase the participation of women in the South African economy.

2.4.5. Social and Economic Effect of ATM Crime

Bisnath, (2014) evidenced that the biggest concern when ATM crime is reported is on the Financial loss. This cash loss is usually intended for something be it managing a household, family or expenses. However the effect of the incident is not limited to the economic loss but to the user being recorded as a victim, adding themselves to the SA crime statistics and the trauma experienced as a result of the incident by the user. Would the user have reservations based on fear in using the ATM device again? Are we becoming socialized to the crime hence diluting its seriousness? (IOL, 2016). ATM crime is indeed a catalyst to other serious scheduled offences of kidnapping, rape and assault.

It remains evident that there is both a social and economic effect of ATM Crime on the lives of women victims. The extent varies in monetary loss and severity in South Africa compared to recorded incidents in the global village. Recorded incidents in the United States extends to women being held hostage until all the cash is withdrawn from the account, leading to other offences of kidnapping, assault and rape. (Turlock, 2016) The magnitude of recorded incidents of this nature

far surpasses the recorded incidents in the local village. The most recent recorded incident was one of three women being bundled in a car and held hostage until card pin details received (IOL, 2017). In South Africa a substantial rate of incidents lean towards trickery. The perpetrator causes confusion and or chaos whilst the ATM user is at the ATM. The user then seeks the assistance of the perpetrator. Once the pin is divulged the user has become a victim. It is still vague why a user would trust an unbeknown person to assist at the ATM. One probability is lack of knowledge on ATM safety. Thus the lack of education resulting in a lack of confidence, could be a motivating factor that users use to create the opportunity to be assisted at the ATM by unknown third party criminals.

Based on international trends and frequency it is purported that an increased understanding and usage of the ATM devices may increase the severity of incidents. Presently the incidents (www.IOL.com) reviewed in KZN depicts users at the ATM being tricked or conned into revealing pins involuntarily. This makes the crime an easy financial gain without the need for bodily harm to the user.

2.5. Gender equality and women empowerment

As suggested in the title and aims and objectives of the research the focus is on women as victims of ATM crime. Thus conceptualising gender as a construct is relevant to the overarching discourse of this thesis. This section attempts to show how gender inequality weakens women's social and economic positions thereby rendering them vulnerable as citizens. To begin with, broadly speaking, gender equality breaks free from the limitations set by stereotypes on whether you are born male or female. It is not just equal opportunity but rather includes behaviour, aspirations and needs of women and men that need to be considered, valued and favoured equally. Women and men do not have to become the same.

According to the United Nations, while the world has achieved progress towards gender equality and women's empowerment under the Millennium Development Goals (including equal access to primary education between girls and boys), women and girls continue to suffer discrimination and violence in every part of the world.

Yet gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world. The idea of providing women and girls with equal

access to education, health care, decent work, and representation in political and economic decision-making processes is to facilitate sustainable economies that benefit societies and humanity at large (United Nations, 2015).

In assessing how South Africa is doing against the United Nations Millennium development goals an indication is that South Africa is falling short in gender equality standards. The majority of women in South Africa are not benefitting from gains made in terms of gender equality. This is in part caused by gender-based violence, according to the Commission for Gender Equality. South Africa cannot achieve complete gender equality because many women – particularly those in the rural areas – do not have access to reproductive health services, and the government is slow in dealing with gender-based violence (Oliphant, 2015).

Through the Global Gender Gap Report, the World Economic Forum assesses the magnitude of gender discrepancies and their progression trajectories over a period of time. The idea is to understand the relative gaps between women and men across four key areas: health, education, economy and politics. The 2016 Global Gender Gap Report covers 144 countries. After analysing over a decade of data the report shows that progress is still too slow for realizing the full potential of one half of humanity within our lifetimes. This indeed is a worrying picture.

Nonetheless the Global Gender Gap report 2016 ranks South Africa 15 out of a 144 countries. The report provides data in terms of gender-based gaps in accessing resources and opportunities in countries rather than the actual levels of the available resources and opportunities in those countries. Thus the focus is on gender equality rather than women empowerment. The report demonstrated that South Africa had closed almost all of its education gender gap, except for literacy. While access to education is provided literacy remains an issue.

The report maintains that in understanding the extent of women participation politically and economically in a nation one may determine the level of women empowerment. Although the number of women who participate in South African politics has grown which is demonstrated by the number of female ministers in cabinet, the country has not gained currency in terms of wage equality as per the Global Gender Gap report 2016.

2.5.1. Crime against women

As discussed broadly in the section above gender based violence are violent acts primarily committed against women as a consequence of historical unequal power relations between men and women. Historically enacted made women the property of men, hence making them subservient. The conduit between the historical discourse of women, as property of men, and the the current discourse (essence of this thesis) is that the patriarchal system shift that is yet to be globally achieved despite many good policy initiatives continues to render women vulnerable. This includes the under reporting of crime by women and credible data to understand women as victims of crime as well as the extent of crime and violence against women. As Morrison et al, (2007) alert us that women under report due to reasons including stigma, taboo and societal norms.

Thus the efforts to improve the position of women, in order to reduce crimes against women must improve. Media evidences the growing number of women as victims of crime. Various forms of crimes against women- physical, public, emotional, mental are recorded on a daily basis (www. IOL news). There have been some attempts to reduce such crimes and the first step is to recognize these crimes. In a project which took place during 2001 and 2002, that built on work examining the public and private nature of women's fears of crime and violence Meth (2004) found that the women adopted strategies involving the active avoidance of particular areas, bridges, streets, townships and groups of people, to minimize the criminal threat. Several of the women admitted to arming themselves with sticks or knives to use in self-defence, if necessary. For example, five women in a focus group from Dunbar described the weapons they carried: "I always carry a stick"; "I have a short stick with a bolt on the tip... I have used it many times"; and "...my experience is that most if not all criminals are cowards; if you take out a weapon, unless he has a gun, he runs away."

Commenting on laws enacted to ensure that individuals live in a fair and just society without fear Meshram, (2015) argues that "It is the application of the law and the effectiveness of policing that determines the rate of crime. However law making alone is insufficient, what must be done is to check whether the law enacted is effective and it is properly regulated in society". Hence increasing access to justice for survivors of gender based violence, provide support to women who have been affected by violence and preventing-gender based violence should gain priority.

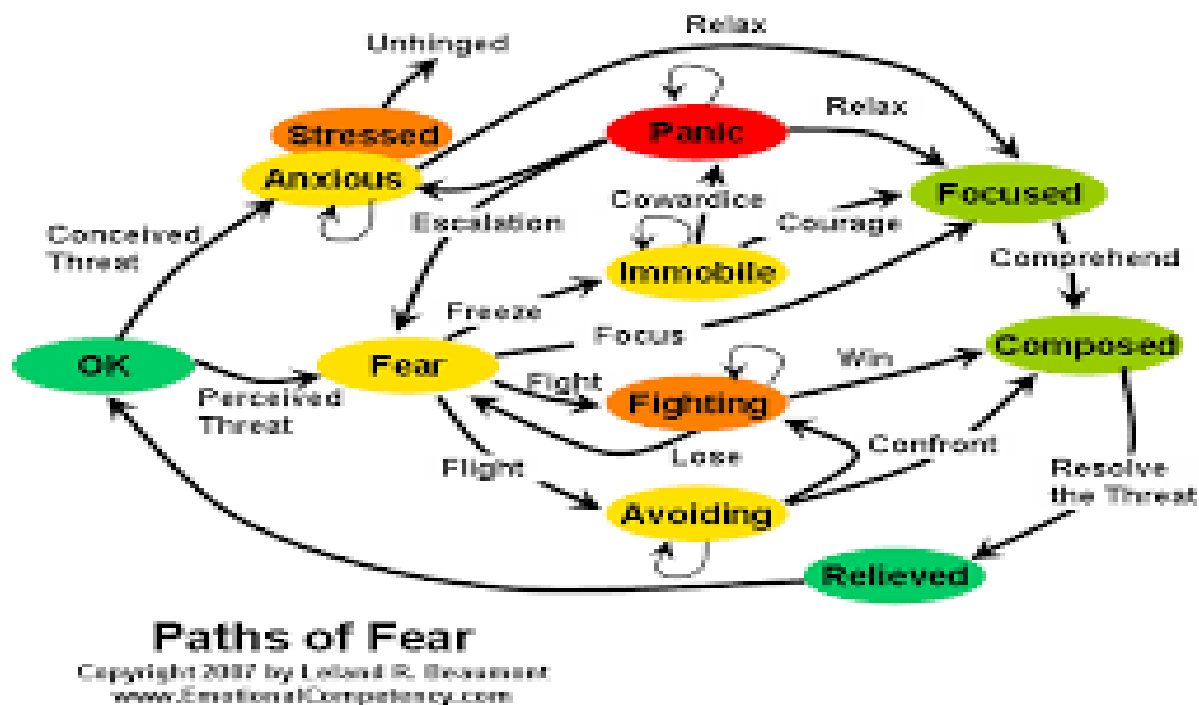
2.5.2. Feeling Unsafe

As discussed in chapter one the National Development (2030) aims to guarantee safety of all who live in South Africa. Yet media reports and the annual SAPS crime statistics offer a different narrative. Feeling unsafe is as much physical as it is physiological and psychological. These dimensions will be briefly discussed herein.

Twemlow, *et al.* (2002) maintain that one etymological root of the word “safe,” means “whole.” They further maintain that the Latin “salvus” also implies healthiness. These researchers believe that those dimensions of feeling safe are frequently forgotten. Nonetheless they purport that a whole and healthy person feels safe both inside and outside. Consequently this feeling of safety obtained from feeling whole then permeates the individual and the community.

On the notion of fear Gross and Canteras (2012) argue that the term ‘fear’ is used to describe the feeling that arises when we experience an impending threat to our survival and that fear which is an emotion that has powerful effects on behaviour and physiology across animal species. The amygdala is the brain region most implicated in fear. The figure (3) below shows the large range of stimuli and situations that may serve as objects of fears and phobias in humans, Ohman, Dimberg, and Ost (1985; see also Ohman, 1986).

Figure 3: Paths of Fear



Mayr (1974) in his argument on paths of fear first made a distinction between behaviour directed toward the living and the non-living world which he referred to as communicative and non - communicative behaviour, respectively. Then within the communicative category, Mayr made a further distinction between behaviour that is focussed toward members of one's own and other species (intraspecific and interspecific fears, respectively). Ohman *et al.* (1985) added to this discourse on fear by distinguishing between fears of physical objects or events (e.g., heights, thunder; non-communicative fears), fears of other humans (social fears; communicative intraspecific fears), and fears of animals (communicative interspecific fears). These various distinctions of fear were linked to three important classes of human phobia: nature phobias, social phobia, and animal phobias (cf. Diagnostic and Statistical Manual of Mental Disorders, fourth edition; DSM-IV', American Psychiatric Association [APA], 1994).

For Lieber (2007), "Feeling unsafe" in the public and political sphere is a phenomenon that has an equal impact on individuals regardless of social and gender differences. Robert and Pottier, (1998)

purport that this feeling involves at least two dimensions, which gained momentum through sociological studies: on the one hand, the way people refer to lack of safety in public space, on the other, fear for oneself. Hanmer, (1977) and Stanko, (1990) commenting on feminist-oriented studies, conducted by primarily Anglo-American researchers, show that when women express personal fears their mobility is inhibited. This according to Valentine, (1989) indicates the importance to study the ways in which women use or occupy public places, especially since the media, family and friends, aim to persuade women that public places are where men elect to commit violent acts against them. Consutez *et al*, in the qualitative aspect of their research on women's feelings of safety accentuated how women are mentally affected by avoiding these spaces. They further maintained that the avoidance tactics that women display suggest that the norms that apply to public places remain generally hostile to women. Thus they concluded that "being female in the street is not an unmarked characteristic, and there are many sanctions to remind women of the role they are supposed to play and the practices expected of them. Additionally it seems that the reasons for the fears that women declare are not necessarily linked to personal experience of physical assault but rather gender-specific violence. This research also found that the social impact of feeling insecure is evident when the quality of life of citizens deteriorate.

This climate of insecurity fuels further fear of being a victim of crime, especially in the case of previous direct or indirect victims. This fear also influences the behaviour patterns of victims. As mentioned earlier victims begin to change their daily routines. They may confine themselves to their houses, avoid passing by dangerous locations, and (depending on affordability) improve or install security within their homes. Consequently these changes impact how they use public places, owing to the uncertainty about safety. Similarly approximately 36.0% of people using public transport in the metropolitan area of Mexico City say they feel unsafe or very unsafe. In the survey conducted by ENVIPE, the most insecure places for the participants are ATM on streets, banks, public transport and the street.

Khameneh and Ebrahimpour (2007) argue that the need to create safe spaces that accommodate women must be a participatory process especially in the face of strong social relations. Communities serious about creating safe public spaces for women should first analyze who and when, inter alia, public spaces are used. In undertaking this analysis Khameneh and Ebrahimpour

(2007) argue that the outcome will provide critical data of when certain groups, like women or girls, do not use a space. This information will then provide an indication that the space feels insecure to members of that group. They conclude that the planning and designing of public spaces where women and girls feel safe should be ongoing and must consider the physical and social characteristics of the particular space. Continuous evaluation of the social and physical implications of the planning and design process will facilitate the success of such an exercise (Khameneh and Ebrahimpour, 2007).

2.6. Criminal Victimisation

Victim surveys are typically believed to add value and provide a much more meaningful understanding of the way that crime is experienced in a society. The very first National Victimisation Crime Survey (NVCS) in South Africa was conducted by Statistics SA (Stats SA) in 1998 followed by a survey conducted by the Institute for Security Studies (ISS) in 2003 (Holtmann). Burton believes that victim surveys have greatest value when they are regularly conducted and can therefore be used as real comparators in assessing the information provided by crime statistics (Burton *et al.* 2003). Although formal crime statistics reporting was only formalised in South Africa's new democratic dispensation crime statistics that did exist were not open to public scrutiny. Nonetheless the new dispensation ushered in mandatory reporting of crime statistics. Although the yearly statistics are often challenged by the public for potential inaccuracies the South African Police Services usually provide annual crime statistics. These reports (Figure 2a and 2b) appear to indicate an increase in crime rates in some categories. These crime statistics are the 'most reliable' way in which the public is able to understand crime and victimisation patterns, locations and targets which changed as crime was democratised (Super, 2010). Thus the victimisation surveys assisted in validating some of the crime statistics recorded by SAPS.

In terms of impact on feelings of insecurity Avila et al. (2016) purport that the experience of victimization implies a greater perception of insecurity. Although South Africa has made some good strides in terms of seeing a reduction in some categories of crime South Africans still feel that violent and property crime is increasing which has an impact on lifestyle. In some neighborhoods the majority of households don't feel safe to walk alone in parks or allow their

children to play freely in their neighborhoods according to Statistics South Africa's (Stats SA) Victims of Crime Survey (VOCS). However, the climate of insecurity in South Africa pervades a large number of citizens. Given that crime in South Africa is high and as mentioned earlier is often gendered again demonstrates the importance of investigating in depth the roles of both genders in the perception of insecurity and changes in routines.

Zarabi (2013) conducted a study, in which 8,170 subjects participated, to understand the relationships between victimization, perception of insecurity, and changes in routines between men and women. The participants comprised victims and non-victims. In his findings Zarabi ascertained significant gender differences on victimization in terms of perception of insecurity, restrictions on everyday activities, and protection measures. Among women participants (victims) there was significant restrictions in their everyday activities in comparison to non-victims.

In a Making Safer Places projects, initiated in the late, nineties, Slusky, (2004) sought to find out how changes to the physical environment might help women to recover the right to use public spaces voluntarily (Slusky, 2004). Slusky drew attention to the possibility that while many women may not have questioned the social factors that have contributed to their fears, the process of engaging with these issues through discussion with other women led many participants to join groups and organizations working to change the relations between the genders and the social frameworks that perpetuate them (Williams, 2000).

Morgan and Smith (2006) found that although men, when compared to women, are more often crime victims on public transport it is women who declare being more fearful than men. Ceccato 2013; Dymén and Ceccato (2012);Loukaitou-Sideris (2015; 2016) and Smith (2008) argue that understanding the distinctions between male and female victimisation patterns are important in crime prevention discourses.

Research in the Global South that focussed on women's access to public spaces such as public transport showed that unreliable and unsafe public transportation impacts women's mobility. In strategizing how to avoid bus routes that make women unsafe they may avoid certain routes to neutralise their feelings of insecurity (Junger 1987). Keane (1998) adds that women may even reschedule their trips or wait to be accompanied which places a further restriction on their mobility. An added disadvantage for these women is the predominantly male dominated drivers

and conductors in the transport sector. Commenting on this male bias Peters (2013) maintains that this could affect women's safety needs in public transportation research and policy.

2.7. Cost of Crime

As already mentioned crime is a major part of society broadly and in South Africa specifically. Previous discussions in this thesis also demonstrated that it is also widely accepted that crime imposes costs on society. Chalfin, (2015) argues that the extent of the cost of crime on society is unknown and the way it is measured varies. Hence there is no single method for gauging the social and economic cost of crime. In reviewing research studies concluded on the cost of crime, although varied, the goal remains common namely seeking the quantum of the impact of criminal activity on the economic and social lives of crime victims and on the community in which the crime occurred. The social impact of crime may never be quantifiable given the emotional and psychological dimensions. Crime is costly but so is crime control.

2.7.1. Socio-economic cost of crime

Notwithstanding the discussion in 2.7 general crime discourses purport that it is necessary to measure the cost of crime to understand the impact of crime on society, justification of spend, public and private, as spend is correlated to the perceived harmfulness of crime, impact on preventative measure costs and crime control initiatives. Depending on the estimates it creates awareness of the required policies, impact of crime and potential gains that can be achieved from reductions in crime. It further indicates how successful the government is in reducing the impact of crime. In determining costs one way want to understand two distinct dimensions the economic cost of crime there is a primary and secondary impact of crime also referred to as direct and indirect economic effects.

As a consequence of crime the primary, direct effect is loss of property, medical and health care costs, the costs of victim support, etc. In anticipation of crime or the perceived threat, public and private sector invest money in precautions to avoid crime. This includes target hardening including but not limited to locks, camera surveillance and alarms.

The public authorities spend public resources on policing, prosecution, court proceeding, sanctions, etc. (these effects are also referred to as fiscal effects). All these costs are tangible.

The secondary, indirect effects are changes in the economy as a result of re-expenditure linked to the primary effect. Secondary costs, on the impact of crime, on a macro-economic level include:

- The growth of the economy;
- What is earned;
- How labour will participate in the economy;
- Expenses on security measures; and
- Restructuring resources that then create uncertainty and inefficiency.

On a micro level the impact of crime includes:

- Reduction of competitiveness between companies and investments.
 - Possible depreciation on property value
 - Decrease in the impact of tourism
- Possible decrease on quality of life (Detotto and Otranto, 2010)

As already discussed some of the less tangible costs of crime include psychological pain and trauma which could decrease the victim and family's quality of life. The traumatic impact on family and friends could find the victim withdrawing from the family and obsessing whether the external environment holds no or minimum risk. Thus influencing the mobility and socialisation of the victim. Other impacts on the economy is the reduction of jobs consequently stymying spend thus reducing retail sales and tourism.

As previously mentioned crime is a major part of society. The cost of crime to victims consists of three main components: (1) out-of-pocket costs, including lost wages, medical care and stolen property; (2) risk of death; and (3) pain, suffering and fear endured by victims of crime. As presented in numerous prior studies, the cost of crime to society can be divided into four fundamental components:

Victim costs

In this component the victim suffers direct economic losses which may include medical care costs, loss of earnings, and property loss/damage.

Criminal justice system costs

This category focusses on funds that the local, state, and federal government spend on police protection, legal and adjudication services, and corrections programs, including imprisonment.

Crime career costs

Here the costs relate to the criminal's choice to engage in illegal rather than legal and productive activities.

Intangible costs

Intangible costs (already mentioned) refer to indirect losses suffered by crime victims. This may include pain and suffering, reduced quality of life, and psychological distress.

For McCollister et al. 2010) measuring losses across these four components provide an estimate of the economic cost of individual crimes. This broad societal perspective is most appropriate in understanding the economic analysis and program evaluation because more narrow perspectives (e.g., crime victim, criminal justice agency, community organization) that apply to specific stakeholders or agendas may inadvertently compromise the four components (mentioned earlier) (McCollister et al. 2010).

2.8. Duty of liability

Against the backdrop of the South African Constitution 1994 created to recognise and protect the rights of the citizen exists the duty of care. What are the proper roles of police and businesses concerning crime (including ATM crime)?

The Constitution of South Africa prescribes that the South African Police Service has a responsibility to prevent, combat and investigate crime, maintain public order, protect and secure the inhabitants of the Republic. The South African Police is further responsible to protect citizens' and their property, maintain and enforce the law, and produce a safe and secure environment for

all people in South Africa. It is also categorical in that SAPS must prevent anything that may threaten the safety or security of any community, investigate any crimes that could compromise the safety or security of any community, ensure criminals are brought to justice and participate in attempts to address the causes of crime (Constitution of the Republic of South Africa, 1996). In this context the following questions are critical:

- At what stage does the burden exist to protect its citizens against third party crimes?
- At what stage and to what extent does a premises owner have a duty to protect invitees?
- Is there a duty by the inviter to protect invitees against third party crime?

2.8.1. Private liability

The ideology that a duty exists by the owner, inviter, to protect the customer, invitees, on its premises is based on a duty of care. But to what extent does this duty of care extend. In DeYoung (1995) the court was careful in its application of duty of care and applied the reasonable foreseeability test. Was the third party crime foreseeable and not just based on past events? The court was careful not to impose a limitless burden on the inviter as crime is virtually foreseeable anywhere at anytime. However the court also acknowledged that a duty exists if foreseeability could sufficiently be proven, if special circumstances made the instant crime foreseeable.

What is the duty of care a financial institution has to its customers. DeYoung (1995) pointed out that the relationship between a bank and its customer qualifies as a special relationship requiring a duty to protect customers against foreseeable crime. However the protecting of bank customers against third party crimes depends upon the foreseeability of the event.

Teitelbaum, (1994) looked further into the potential liability of financial institutions in relation to crime at ATMs and found that if merchants and shopkeepers generally, whose mode of operation of their premises, do not facilitate a climate for crime then these merchants and shopkeepers have no duty to guard against the criminal acts of a third party, unless they know or have reason to believe that criminal acts are occurring or are imminent and will pose imminent probability of harm to an invitee.

The extent that criminal acts by third parties is deemed foreseeable is limited and may never be deemed sufficiently foreseeable to impose liability on an ATM operator (Teitelbaum, 1994).

2.8.2. Public liability

The prevailing doctrine of the no duty rule where no liability exists for failure of police to prevent crime albeit a special relationship between the police and the victim the role of law enforcement encompasses a duty to protect its citizen as a duty owed to the public as a whole.

In *Ramushi v Minister of Safety and Security* the law looked at duty of care at two levels. Fact based and policy based. In applying fact based the court has to look at whether the defendant's behaviour was negligent in the circumstances and this is governed by the foreseeability test. For liability to arise there must be a causal nexus between negligence and damages. Policy based duty is duty in the fact determined sense for example if there exists a special relation or interest to protect. As a general proposition there is a constitutional and public law duty on the state to protect its citizens, duty of reasonable protection, and the state is liable for failure to perform that duty, unless it can be shown that there is compelling reason to deviate from the principle.

2.9. Prevention of ATM crime

What is the burden on the state and business entities in preventing crime. Research indicates recent legal development of premise liability for third party crimes. Could this development be as a result of the no duty rule of police on third party crime unless the criterion exists of a special condition, negligence or foreseeability.

According to the Harvard Law review, (Police Liability for Negligent Failure to Prevent Crime 1981), an expanded police liability will require government to allocate additional funds for increased insurance or damage judgments. A government suffering large damage judgements should modify institutional practices to reduce the incidence of actionable police negligence. Overall achieving a reduction on the net societal cost of crime. The burden to minimise losses from crime should fall on police rather than victims because police are in a better position to prevent crime. A failure to act passes the burden on to society.

What is the burden on businesses? Should business entities be liable for crimes committed on their premises. These questions arise as society questions who is responsible for providing security for crime.

2.9.1. Public Prevention

In reviewing who should provide Security from Crime (Scheid 1997) the general policing concept of police functions was broken down into 1) prevention, 2) apprehension and 3) punishment. Both prevention and apprehension can be done by society and private citizens. It is only punishment that must be done by the state. This then implies that nothing precludes business entities from taken precautions to prevent crime and help apprehend criminals. The police, where circumstances permit, must protect a citizen but they are not duty bound to do so. This is based on the premises the police cannot protect everyone, everywhere, all of the time.

2.9.2. Private Prevention

The concession of some police functions, prevention and apprehension by private citizens, places additional costs on the business entity to bear. By implementing the most effective deterrent security measures the cost to a business can also be prohibitive. What is the justification of the burden as some businesses, as a result of security measures, could increase profits but similarly the cost to implement the security measures may outweigh profits. Further could security measures being provided by small medium enterprises be higher than the security measures on the street outside the business.

In relation to high risk entities, such as a bank or casino, heightened security is justified but this cannot be universally applied to low risk, smaller businesses.

The business entity employing these measures also pays tax twice to the police services and for monetary damages as a result of crime or alternatively for security measures for example security guards. How fair is the distribution of costs amongst society as private citizens also pay this tax twice to the state and by virtue of increased costs to goods and services to absorb security costs.

Premise liability for crimes focuses on prevention for example a business is liable for the prevention of crime by employing security measures and can be held negligent for failing to do so.

However a business cannot be at fault, held liable for a third party criminal act itself.

2.9.3. Public Private partnership

In evaluating obligations of public and private prevention in the fight against crime everyone has an obligation to do what he or she can to fight crime. It becomes everyone's business to take reasonable steps to prevent crime. Enhancing security measures is effective in discouraging crime on the premises but could displace crime to areas with weaker security measures. The use of police resources to move to other areas in terms of crime patterns is possible. The displacement of crime may not also take place as criminals look for opportunities. What can be agreed is the more resources in the fight against crime the better as opposed to the police only.

In Strike Force Piccadilly (Prenzler, 2009) it emerged that a public – private partnership was successful in halting crime and reducing, almost eliminating, incidents. This initiative also applied techniques of consultation, research and information sharing amongst the public and private sectors. In The Strike Force Piccadilly initiative they adopted problem- orientated policing, situational crime prevention, crime prevention through environmental design and partnership policing. The initiative was aimed at reducing ram raids on ATM devices and as mentioned was successful. The approach adopted was a shift from the investigative and charge methodology, used by police, to a wider situational preventative approach. With the cooperation of the police and retail and banking institutions in an open forum format the following were identified,

1. A number of organisations were working in isolation toward addressing the problem
2. Target hardening measures were fairly basic that is alarms and CCTV cameras
3. Various measures of target hardening were used in isolation
4. Alarm response times by security companies were ineffective
5. False alarms limited police intervention

A consultative process on successful and unsuccessful raids highlighted those ATMs not targeted and reasons thereof. Certain differentiating security measures used and location was one of the

commonalities. Police also interviewed suspects and this data enriched the formulation of a detailed plan. Confidential Intelligence reports were circulated to stakeholders.

Specifically, Pelser (a security specialist and researcher) was invited to assess the impact of Strike Force Piccadilly (discussed in the preceding paragraph), a New South Wales Police initiative aimed to address an increase in ram raids with a specific target on automatic teller machines (ATMs). Using a public –private partnership he planned whether this partnership will yield the planned outcome. As already mentioned the partnership was between police and the retail and banking sectors. Post intervention he recorded a decrease in ATM ram raids halted with a reduction from 69 in the 12 months before the intervention to 19 in the final 12 months of the post-intervention period. In total he claimed a 72 per cent reduction. The success of the partnership was facilitated by a mix of strategies namely a hotline from private security firms to police, installation of target hardening and access control strategies. He concluded that for larger decreases in ATM ram raids, and reduction, of the incidence of attempted and successful attacks a larger problem-orientated strategy of consultation, research and information sharing amongst all stakeholders is suggested.

2.10. Age of Digitalisation and ATM Safety

Digitalisation impacts everything, especially with respect to finance, and its impact is transformative. Digitalisation is a trend driven by three factors namely customer experience, technology push and economic benefits.

One of the oldest technological devices allowing a customer to interface with the bank through multiple channels is the ATM. The ATM device has today been rapidly advancing in terms of capability and interface and provides a wide range of capability. In enhancing devices and providing reach in remote areas the multiplier effect is the increased migration of customers to devices for 24 hour accessibility and immediate banking (discussed earlier in chapter two).

So as ATMs remain one of the most popular, convenient ways for people to transact, the roll out of ATM devices will continue. In the local village cash as a currency for trade remains very much a part of daily life for most South Africans. Whilst this uptake on ATM device usage remains and becomes more accessible what are the safety measures surrounding same as ATM's by virtue of

holding cash is a risk and a magnet to criminals, be it the device itself being a target or the user transacting.

2.10.1. Risk factors and forms of safety

The new Oxford dictionary of English (Pearsall and Hanks, 2001 Pearsall, J. and Hanks, P. (eds), 2001) describes safety as: “The condition of being protected from or unlikely to cause danger, risk or injury”. The word safety, according to Albrechtsen (2003), derives from the Latin word ‘saluses’ – uninjured.

Robbery is only one of several crimes that compromises safety and could occur at the ATM. Other associated crimes that take place at the ATM are;

- Robbing staff mandated to fill ATMs with cash
- Stealing personal identification numbers (PINs) (including theft by “shoulder surfing”)
- Stealing through intercepting electronic data
- Making fraudulent electronic transactions
- Bank/ATM service employees stealing money
- ATMs being burgled (including theft of entire ATMs)
- Using ATM cards obtained fraudulently from customers through dummy ATMs that keep their cards (Scott 2001).

The three most common scams used to defraud bank customers in South Africa (Banking Tech 2017) is Stolen Card Fraud, where the card and pin is stolen from the user, Counterfeit Card Fraud which includes shoulder surfing and card skimming and Card Not Present Fraud.

Whereas the Banking Association of South Africa records the Stolen Card Fraud under the category Card fraud it is concerning how these statistics are recorded by the police. It is unclear if these statistics are recorded as theft or robbery. As consequence of stolen card fraud the incident could lead to other more serious offences of assault, aggravated robbery, kidnapping, rape and or murder.

In the global village it is not uncommon for victims of the initial crime of ATM card fraud, to be subjected to more serious crimes. Media reveals that women robbed at the ATM are prone to

physical assault, kidnapping and or sexual assault. In a study in Limpopo Sanpath (2009) ascertained that criminals are using increasingly dangerous methods to defraud and rob bank customers. Some have resorted to using sedatives to incapacitate targets (Sanpath 2009.)

However, the Code of Banking Practice (2012) sets out inter alia minimum standards between the bank and customer, fostering customer confidence in the banking system. A major gap in the code however is its failure to acknowledge customer safety generally at ATM's or women as vulnerable customers at ATM. Thus the code does not provide minimum standards for women ATM users/customers.

Despite the introduction of ATM's in South almost four decades ago it was not until late 2016 that the Banking Association of South Africa, which represents the banking industry, advised users of risks at the ATMs and tips to avoid becoming a victim of ATM fraud (Banking Association of South Africa 2016). Nonetheless the table below captures ATM safety tips to users.

Table 1: ATM safety tips

<ul style="list-style-type: none">• Use ATM's where you are comfortable.
<ul style="list-style-type: none">• Avoid using the ATM where you feel unsafe by suspicious-looking individuals who are in the vicinity.
<ul style="list-style-type: none">• Be prepared (card in hand) on approaching the ATM.
<ul style="list-style-type: none">• Avoid using ATM's if it appears to be tampered with or damaged.
<ul style="list-style-type: none">• Refrain from seeking the assistance of strangers at an ATM, especially when you are challenged with completing a successful transaction
<ul style="list-style-type: none">• Do not expose the ATM keypad to allow other users to view your pin when you enter it.
<ul style="list-style-type: none">• Never disclose your pin to anybody, not even to the bank or police.
<ul style="list-style-type: none">• If you experience challenges processing your transactions Press the Cancel key, withdraw your card and visit another ATM
<ul style="list-style-type: none">• Contact your bank and/or police if your card gets jammed, retained or lost, or if someone interferes with you at an ATM by using the help line and/or nearest phone.
<ul style="list-style-type: none">• Never feel pressurised to hastily conclude your ATM transactions. On concluding your transaction make sure you have your card, slips and or money carefully secured in your wallet, handbag or pocket before leaving the ATM.

Interestingly in Sewpersad and Minnaar's (2010) research on ATM safety they found site audits made reference to ATMs with similar security or lack thereof. In these site audits the criteria assessed were lighting, CCTV Surveillance, Customer awareness information, Panic/alarm buttons, ATM Alarm, Presence of a Security guard, ATM intercom, Alarm system for in store ATM's, fence, bollards and roller shutter doors.

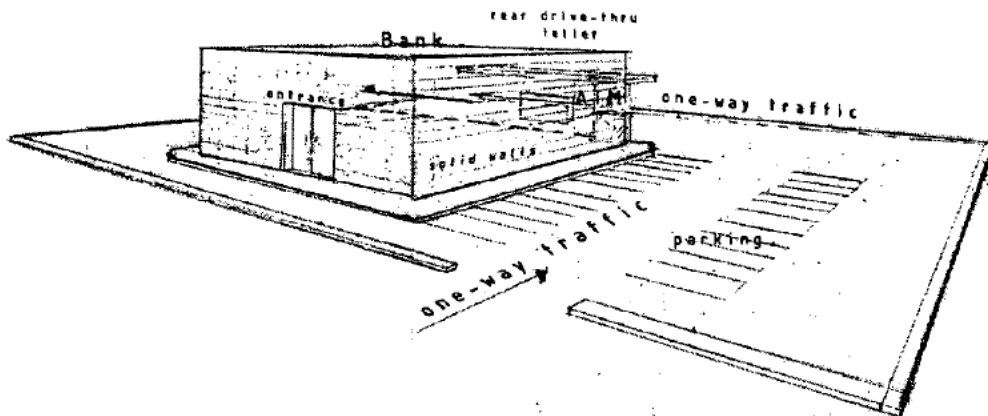
However, their research highlighted inconsistencies in security application of minimum security requirement at ATMS if any exist at all. Katyal (2002) researched the benefits of lighting in helping anyone viewing a situation to see it more clearly thereby deterring/avoiding some crimes. He found that extra lighting encourages people to be in the area in the first place because greater visibility creates a sense of security. He further argued that an increase in the number of eyes on the street

constrains crime. Similarly Hoover asserted, “It is self-evident that darkness is a friend to crime,” and the “thief, the arsonist, the rapist, the Peeping Tom and all other perverse individuals often depend on darkness to cloak their misdeeds and conceal their identities.” Katyal reporting on lighting in parking facilities found the “single most important” security precaution was lighting. In a classic study in London the results revealed that more property offenses were committed in London in the winter months and the increase was traced in part to the longer periods of darkness in those months. British research today shows that forty percent of night-time street crime occur when lighting levels are at five lux or below (a typical side street has a lighting level of about 18,000 lux on a bright day and two lux at night), while only three percent of such crime occurs when the lighting is above twenty lux.

2.11. Security for Banks

In Katyal’s research on the importance of protection of targets he sketched a common plan for a bank (figure 4 below).

Figure 4: Common plan for a Bank



According to Katyal when the bank was initially constructed it took the form of a fortress with a few windows and walls that obscured visibility. The incidences of bank crime showed that thieves preferred such designs because of a lack of natural surveillance such as natural lighting. The parking lot was within few individuals’ visibility posing an additional security challenge. Because

of the solid wall between the parking lot and the inside of the bank, bank patrons were at risk of being robbed when exiting the banking premises. Katyal adds that psychologically criminals decode environmental “cues” to assess the likelihood of success of a given criminal act. Another classic study, with implications for natural surveillance, showed that children are also more likely to act dishonestly when there is less supervision around them.

Sherman (1995) also provides support to the argument of security measures by mentioning that in the post-riot era of the late 1960s, security measures in quasi-public spaces gradually became viewed as a necessity. The generation that feared a “cop on every corner” in the 1960s now fears that there will not be a guard in every lobby. This expectation was enhanced by the third condition, the emerging science of environmental criminology, which narrowed the determining factors of crime from macrosocial forces to the immediate environment of each criminal event. The new science was part of a general movement toward rational choice explanations of criminal events, the premise of which is that crime is not abnormal but rational; criminals choose to commit crimes when the expected gains outweigh the expected costs. This hotly debated premise leads to even more debated conclusions about whether would-be security measures in any specific place, from uniformed guards to brighter lighting, can deter would be offenders from carrying out their crimes.

In response to the increase in victims of ATM crime the Honduran Banking and Insurance National Commission issued Safety Standards for operating ATMs. Previously there were no rules regulating to physical security at ATM’s but with the Security Standards, owners must employ mechanisms guaranteeing privacy, appropriate security measures where installed by virtue of CCTV with good resolution, external ATMS must be installed in an enclosure with internal lock or absence of same must have a security guard during opening and operation. The approval of the Safety Standards was a significant advance in providing physical security measures for ATM users. Honduras was seen to be adopting a protectionist trend (Solorzanno, 2013).

In Bangalor (Karnataka, 2016) the police ordered all banks to ensure proper safety measures implemented at their ATM points. Safety measures where round the clock security guards, CCTV cameras and burglar alarms. Police closed 35 unguarded ATMS.

According to the Daly City, California, the law sets minimum standards for ATM lighting. It also prescribes procedures for evaluating the safety of ATM's and requires that notices be available to ATM users outlining basic safety precautions for using ATM's. Although ATM environmental

design issues are covered in the law, customers are expected to take in other considerations in advance of choosing an ATM.

2.12. Prevention Strategies

Zhang et al (2017) argue that in the commission of ATM crimes more and more perpetrators are deliberately covering their faces to avoid being identified. In their extremely scientific research they proposed a fast and robust face occlusion detection algorithm for ATM surveillance. This form of detection would detect arbitrarily occluded faces. In their research (algorithm), they opted to use the Omega shape formed by the head and shoulder of the person. This allowed them to use the head localization to tackle severe face occlusion. They first constructed a novel energy function to detect elliptical head contours. Then, they developed a fast and vigorous head tracking process that makes use of the slope and shape cues found in a Bayesian framework. Lastly, to verify whether a detected head is occluded or not, they proposed to fuse information from both skin color and face structure using the AdaBoost algorithm. Findings using this process showed that their proposed algorithm can achieve 98.64% accuracy on face detection and 98.56% accuracy on face occlusion detection, even though there are severe occlusions in faces, at a speed of up to 12 frames per second. If implemented this could be a major breakthrough in apprehending ATM criminals.

CHAPTER THREE: THEORETICAL PERSPECTIVES

3.1. Introduction

The following chapter presents various victimisation and criminological theories to better understand women's feelings of safety as potential victims of crime. The researcher firsts presents a short explanation of the purpose of theories in criminological research and what constitutes a sound theory, followed by the theoretical framework used in the present study.

3.2. The purpose of theory

Abend, (2008) and Swanson (2013) propose that “theories assist to explain, forecast, and provide an understanding of phenomena and, in many cases, challenge and extend existing knowledge “within the confines of critical bounding assumptions”. They add that structurally the theoretical framework holds or supports a theory elected to understand the phenomenon of a research study. The theoretical framework provides insight into research problems and underscores its existence.” Williams and McShane, (2010) point out that “Theories are a product of scientific inquiry and help us understand the world around us”. Burke (2014) adds that “Theories can be simple or complex, however, criminological theories tend to lean more towards the latter (Burke, 2014). Akers (2012) believes that theories involve statements on the relations between actual events, and inform policies or actions taken. Criminological theories can be broken down into two major types, namely theories of law and criminal justice, and theories of criminal and deviant behaviour (Akers, 2012).

These theories are important when criminologists attempt to understand criminal offending (Akers, 2012; Bohm and Vogel, 2011:). The relevance of Criminological theories is in its ability to facilitate what needs to be examined in the world to gain an understanding of crime and what needs to be transformed in order to reduce crime. Theories further provoke an understanding of those aspects in society that are necessary to influence a decrease in crime. Thus by pointing out what to look at “(e.g., *peer groups, the quality of neighborhoods, psychological states*), *theories of crime and criminality inadvertently point out what researchers, politicians and policy makers may ignore in crime control or reduction*”. Hence criminological theories inform public policy even when the correlation connection is not always obvious.

Theories provide a framework within which we are able to explain interrelated concepts (propositions) and the relationships between them, for example criminal behaviour and biological factors. Additionally, they are used to explain whether observed patterns are meaningful or not (Bohm and Vogel, 2011; Burke, 2014). Theories aim to correctly describe and explain phenomena, make predictions, and determine conditions necessary for the phenomena to occur, whilst controlling the outcome of a phenomenon by applying the knowledge discovered (Winfrey and Abadinsky, 2003). In their more recent book on *Criminological Theories: Introduction, Evaluation, Application* Akers and Sellers (2013) propose that for maximum effectiveness (practical) theories must make sense (logical consistency), explain crime as widely as possible (scope), and be as concise as possible (parsimony). Most important for these theorists is that the theory must be true or correct (validity). Once the theory meets these fundamental goals, the theory must then be applicable to real problems applications and ultimately secure policy implications.

3.3. Characteristics of a good theory

Deciding whether one theory is better than another depends somewhat on its ability to explain and predict crime in terms of typology, spatial-temporal factors and different levels of analysis and the integration of dispositional/ situational/ systematic factors or biological/ psychological/ sociological factors (Sewpersadh, 2012). She also suggests that in evaluating whether a theory is indeed a good or appropriate one the theory itself should be based on its breadth (ability to explain different criminal behaviours), comprehensiveness (taking account of all variables), precision (ability to specify all-encompassing factors of the causal relationships), and depth (ability to clarify the linkage of causal variables in creating a systematic whole) (Bohm and Vogel, 2011).

As mentioned earlier (Akers, 2012; Tibbetts, 2012) argued that for a theory to be considered as sound it must conform to a particular set of scientific criteria (Akers, 2012; Tibbetts, 2012). In Akers work on *Criminological Theories* he stressed three scientific criteria that theories should meet. The first is logical consistency. The second is scope and the third parsimony. A theory he adds should have clearly defined concepts and its propositions should be logically stated and internally consistent. For Akers the scope of a theory refers to the range of phenomena which it proposes to explain. In terms of testability, a theory should be testable against tangible, observable, and measurable empirical findings. This means the theory may be authenticated or refuted by using empirical evidence through quantitative validation. In addition concepts must be clearly defined,

non-tautological and more closed ended (Akers, 2012; Tibbetts, 2012). Hence, theories must be able to withstand verification through observation and validation of foretold relationships, and falsification, thus disproving a proposition (Bohm and Vogel, 2011).

Empirical validity: The theory must be supported by scientific, experiential proof. Probability of causality is often used, with the validity of the theory being greater when the strength of associations and correlations increase (Akers, 2012).

Usefulness and policy implications: These are necessary for a theory to provide principles or recommendations to solve a problem and effectively address a criminal justice or social policy issue. It is vital in the evaluation of the theory and the development of further criminological theories (Akers, 2012; Tibbetts, 2012).

Evidently, theories are required to meet certain criteria in order to be considered sound theories, not only in terms of internal consistency and usefulness but also with regards to testability and validity, as they need to be supported and based on experiential proof. Quality theories are therefore high in explanatory power, precise, and able to clarify causal linkages.

3.4. Theoretical framework

The current theoretical framework combines two theories to substantiate an informed understanding of women's perceptions of vulnerability as ATM users. The theoretical framework draws primarily on theories of victimisation, given that the focus of the study is on victim vulnerability. The two theories that guide this study are namely the Lifestyle /Exposure model of personal victimisation Theory and the Routine Activities Theory.

The Lifestyle Exposure model was developed by Hindelang, Gottfredson and Garofalo in 1978 influencing developments and explaining risks in victimology.

The Routine Activities Theory developed by Lawrence E. Cohen and Marcus Felson (1979) remains one of the most popular criminological approach.

The importance of these as part of victimization theories have only in the past four and a half decades become a common feature of criminological work. This notion is reinforced by Meier and Mathe (1993) who revealed that the works of Wolfgang (1958) (on homicide) and Amir (1971) on rape, encountered political difficulty because it appeared to blame the victim for the crime. This idea, smacked of “blaming the victim,” according to Meier and Meithe and was used by liberal crime control ideology. Politically, the outcry was for victim blaming to be avoided at all scholarly cost, even truth. Nonetheless victimization theories generated empirical, as well as anecdotal, support, most notably in the form of lifestyle-exposure (Hindelang, Gottfredson, and Garofalo 1978) and routine activities theories (Cohen and Felson 1979) and were thereafter used more commonly. Meier and Meithe (1993) contended that, “The long journey to respectability is hard to explain, but the high (or low) points can at least be identified.”

Within victimology there have always been different ways of thinking about how human suffering power and choice are interconnected (Walklate, 2018). Nonetheless early research such as that conducted by Garofalo (1914) noted (somewhat controversially) that a victim may provoke another into attack. Later in the late 1930's and early 1940's a barrister specializing in criminal defence attorney work began a series of studies designed to assist defence attorneys in the preparation of cases on behalf of their clients. The barrister was Benjamin Mendelsohn, and his studies notably one on rape resulted in the delineation of a typology of criminal victims. This typology consists of the six categories namely completely innocent victim (typically children or those who are attacked while unconscious); Victim with minor guilt (often victimized because of ignorance); voluntary victim, whose guilt is equal to that of the offender (a suicide pact, for example); victim more guilty than offender - one who provokes or induces another to commit crime; victim who alone is guilty-the attacker who is killed in self-defense; and the imaginary victim -- who has suffered nothing at all but who accuses another falsely (Sengstock, 1976).

Like Mendelsohn, Hans Von Hentig, who fled to America from Germany during 1940, was very much concerned with the understanding of the victim-victimizer dyad. Both writers explored the familial and natural origins of victimhood, victims, characteristics, their relationship with the perpetrators, and then proposed a victim typology. Hans Von Hentig's typology is based in 'victim-proneness' and Mendelsohn categorized capability. The psychology of victims and the

dynamics and victim hood that have been earlier ignored, but due to this new approach, lead to the tendency to blame the victim (Meier and Meithe, 1993).

3.5. Lifestyle /exposure model of personal victimisation theory

As already mentioned one of the first and foremost models explaining differential risks of victimisation is the lifestyle exposure model developed by Hindelang, Gottfredson and Garofalo in 1978. The fundamentals of this model was based on data gathered during victimisation surveys conducted in eight cities, namely Atlanta, Baltimore, Cleveland, Dallas, Denver, Newark, Portland and St. Louis (Schurink, et al., 1992).

Nonetheless, like Mendelsohn and Von Hentig, Madero (2018) adds that according to lifestyle exposure theory persons with certain demographic profiles are more prone to experience criminal victimization because their lifestyles expose them to risky situations. She further maintains that the probability of victimization increases as individuals increase the amount of time spent in public spaces, particularly at night, and time spent among strangers.

The lifestyle exposure theory of victimisation formed the basis of, and influenced much theoretical developments in victimology. The aim of this theory was to understand why some individuals were more prone to personal victimisation. Results from the work of popular victimology researchers such as Fattah (2000) and Nofziger and Kurtz, (2005) revealed that risk of victimisation is a result of lifestyle, as certain antecedents of a lifestyle (routine daily activities, e.g. vocational or leisure activities) influence differential victimisation. Fattah describes lifestyle as “patterned ways in which individuals channel their time and energy by engaging in a number of activities” (Fattah, 1991).

More specifically, lifestyle-exposure theory suggests that the differences in individual’s lifestyles are the outcome of how individuals’ adapt to structural limitations and role expectations. Both of these are influenced by an individual’s demographic characteristics (i.e. age, sex, race, income, marital status, occupation, and education level) (Hindelang, et al., 1978). Hindelang and colleagues (1978) suggest that role expectations as cultural norms are linked to achieved, as well as ascribed statuses. Role expectations stipulate the ways in which individuals with specific role expectations

should behave (Meier and Meithe, 1993). The role expectations that most significantly impact lifestyles are those related to an individual's dominant or primary status. The primary or dominant status has a broad impact on the way in which the individual behaves (Hindelang, et al., 1978). The lifestyle/exposure model consists of various important elements, namely, role expectations, social structure, adaptations, exposure and associations. With regards to role expectations, demographic characteristics determine the social role of an individual according to cultural norms such as role expectations based on sex and age. For example, the age of an individual influences the roles a person fills, including society's expectations of his or her behaviour (Hindelang, et al., 1978). In terms of lifestyle there is an expectation that children will spend most of their time at home in the security of family members. Similarly adolescents who are in a different developmental stage of their lives are expected to spend more time in the company of peers. This happens more often at school and or participating in extracurricular activities. With respect to young adults who are similar to adolescents it is expected that they will spend more of their time away from their homes engaging either in school, work or social events. Individuals who transition into middle and late adulthood, are expected to play a critical role in their children's life hence spending more time in the home in the process of raising children and engaging their spouse or significant other.

The emancipation of women has led to women, who were historically expected to spend more time in the home nurturing their children and doing household chores, spending more time outside the home which according to lifestyle exposure theory increases their vulnerability to victimisation.

Dastille (2009), in her work on victimisation mentions that once individuals learn role expectations and structural constraints they incorporate them into their routine activities. She concurs with (Hindelang, et al., 1978) that in terms of role expectations, there are certain behaviours that society considers befitting for children, but not for adults. She further concurs that a person's structural limitations such as wealth or poverty can change as a person gets promoted to a better-paying job. This change could herald risks to the individual making him or her more vulnerable to criminalisation. Adaptations to structural constraints and role expectations influence individuals' routine activities and result in individuals associating with those who share similar lifestyles. According to lifestyle-exposure theory, particular lifestyles are related to higher victimization risk

in that these lifestyles involve increased exposure to risky situations and offenders (Hindelang, et al., 1978; Meier and Meithe, 1993; Dastille, 2009).

A further set of theories namely feminist theories (Stanford Encyclopedia of Philosophy, 2014) support the view that there is something fundamentally unique about the victimization experiences that predominantly affect women. This specifically, structural issues of male power and inequality influence the perpetration of interpersonal crimes. This specific paradigm has significant influence on the conceptualisation and central argument of the current study.

When interrogating specifically women's adaptation, due to role expectations and structural constraints, women will adapt at individual and subcultural levels, resulting in specific daily activities and predictable patterns of behaviour (i.e. routine activities). As already mentioned such adaptations may enhance or diminish women's risk of victimisation and involve her acquiring skills and attitudes that facilitate her to function and adapt to the first two elements, role expectations and structural constraints. The skills and attitudes that women may adopt may include beliefs about crime and safety, but it may restrict her behaviour (Sewpersadh, 2010). Women like young individuals increase their chance of victimisation as they decide to engage in high risk activities (such as visiting high crime areas to fulfil their roles) in terms of time and space (Williams and McShane, 2010).

Women's level of exposure to high risk situations in terms of space and time is indeed influenced by her lifestyle. For example the fact that she is expected to play a significant role in the home as caretaker means she should be participating in activities such as shopping, and spending more time in the home. These activities could easily predict her whereabouts leaving her more vulnerable to victimisation both inside and outside the home.

In order for personal victimisation to occur, several prerequisites need to be met (Davis, 2005; Hindelang et al., 1978; Saponaro, 2013):

- The offender and victim must convene at a specific time and place.
- A dispute must develop between the victim and offender, during which the offender perceives the victim to be a suitable target to victimise.

- The offender must be willing to use violence or the threat of violence to achieve the desired effect.
- The offender sees the circumstances of the situation as advantageous to achieve the desired effect with the use of violence or threat of violence.

Hindelang et al., (1978) also suggested eight propositions regarding exposure to victimisation and the implications of certain lifestyles (Hindelang et al., 1978; Saponaro, 2013):

- The probability of personal victimisation is linked to the amount of time spent in a public place.
- The probability of being in a public place at night varies according to lifestyle.
- Social contact or interaction occurs more often among individuals with similar lifestyles.
- The likelihood of victimisation depends on the victim sharing similar demographic features with the perpetrator.
- The amount of time spent with non-family members is a function of lifestyle.
- The probability of victimisation increases as time spent with non-family members increases.
- Variations in lifestyle are linked to the ability of individuals to isolate themselves from individuals with criminal characteristics.
- Variations in lifestyle are linked to the variations in convenience, desirability and vulnerability of the individual as a target for personal victimisation.

The lifestyle/exposure model of personal victimisation has certain limitations. One glaring limitation is the theory's failure to consider 'domestic' victimisation. A further significant caveat is the nuanced crime levels among men and women with similar lifestyles. The limitations described does not in any way discredit the model's significance which is its widespread applicability, wide scope of the term lifestyle, and ability to explain variations in street crimes (Saponaro, 2013). In summary, lifestyle determines the probability that an individual will be in a specific place at a specific time, interacting or associating with a specific type of individual under specific conditions. Hence, lifestyle affects exposure to violence and creates opportunities that affect risk of victimisation (Hindelang et al., 1978; Nofzinger and Kurtz, 2005). Victimisation is therefore disproportionately distributed. A similar argument is made by the routine activities

approach, as routine daily activities affect exposure and risk of personal victimisation (Mesch, 2000). Similar to the lifestyle/exposure model, the routine activities theory also presents an explanation of the association between lifestyle and personal victimisation (Zhang, et al., 2001). The notion of gender as a personal victimisation attribute has been chosen to be discussed more fully as opposed to age and economic status.

3.5.1. Gender

Despite major efforts to promote gender equality in American society, there remain fundamental differences in role expectations and structural opportunities for men and women. Gender stereotyping results in gender differences in such basic activities as where and with whom time is spent, the degree of supervision in daily activities, the likelihood of having contact with strangers, and exposure to risky and dangerous public places. For example, females spend a greater proportion of their time inside the home because as adolescents they are more closely supervised than males, and as adults they are more likely to assume housekeeping and child-rearing responsibilities (Hindelang, et al., 1978). Greater familial responsibilities and the systematic denial of educational and economic opportunities may severely impede women's participation in public life. Furthermore, even when engaged in public activity, women's routine activities are more likely to take place in the presence of friends and intimate others than in isolation. Gender also plays an important role in an individual's routine activities and lifestyle. In this regard, traditionally, males and females have been subjected to different forms of socialisation. Billinkoff (1995) as well as Makepeace (1999) explain that society exposes men and women to different expectations as part of learning their gender identity and sex roles. The manifestations of this have been that men are expected to be aggressive, forceful and tough while women are to be submissive and passive. These modes of socialisation have resulted in women spending more time inside the home than their male counterparts. In this regard Hindelang et al., (1978) state that "females are more closely supervised than males and as adults they are more likely to assume housekeeping responsibilities".

Women today are no longer boxed in the traditional roles as women in the private domain and are increasingly active in the public domain. Women are responsible for household spend, maintenance and are becoming bread winners. Women are therefore more active in social situations, have fewer restrictions on their daily lives, and spend time away from the protective

home environment. Accordingly, women are just as high a risk of victimisation. increasing their exposure to high-risk persons and places, and subsequently increasing their relative risks of criminal victimization

Lifestyle exposure model accounts for differences in victimization risks across social groups. The patriarchal system shift today means women are inclusive in economic growth. Economic empowerment of women sets a direct path towards gender equality and poverty eradication Women make enormous contributions to economies, whether in businesses, on farms, as entrepreneurs or employees, or by doing unpaid care work at home.

Lifestyles are the routinized patterned activities, both obligatory and optional, that people engage in on a daily basis. As women become more visible in the public domain, with patterned behaviour, spending more time outside the home interacting with other peers as well as strangers, this could lead to a greater exposure to criminal victimisation than they were previously exposed to. The basic idea of the Lifestyle exposure model is that there are certain lifestyles that disproportionately expose some people to a higher risk of victimisation.

A developing patterned behaviour is going to the bank and using ATM devices to acquire cash. You work to earn money and need money to get to work. You need money to buy things, both necessities and desirables.

Crime affects everyone and this is no different at ATMS and where opportunity presents itself. Media evidences the prevalence of ATM crime in South Africa and in the Kwazulu Natal province. ATM victims of crime in South Africa is largely its more vulnerable groups including but not limited to the elderly and women.

As women fully participate in the South African economy the need and access to money exposes them more to the public domain than in past history.

3.6. Routine Activities Theory

The general victimization literature has historically suggested that personal, property, violent, and interpersonal crime and victimization can be explained by assessing the situational characteristics of a given event. The routine activity perspective developed by Cohen and Felson (1979) has many similarities with the lifestyle-exposure theory. The theory states that this approach was inspired by

the work of Hawley (1950) on human ecology and Shaw and McKay's work on juvenile delinquency in urban areas (1942) (Kennedy and Silverman (1988). Mannon (1997) states that one of the central features of the routine activity approach is its description of predatory crime. Thus, rather than emphasising the characteristics of offenders, this approach concentrates upon the circumstances in which criminals commit predatory crime (Cohen and Felson, 1979). Predatory crime may be defined as illegal acts in which someone definitely and intentionally takes or damages the person or property of another person (Glaser, 1971).

Specifically, Cohen and Felson (1979) proposed that crime is the result of the convergence of three factors — the presence of likely offenders, the availability of suitable targets, and the absence of capable guardians. According to the theorists, the absence of any of the three elements can hinder the successful execution of a contact predatory crime (Cohen and Felson, 1979; Felson, 2002; Newburn, 2013; Saponaro, 2013; Tibbetts, 2012; Wilcox, 2010). Moreover, they suggested that individuals whose routine activities take place largely within households would experience less victimization, and those who spend the majority of their time away from their homes would be subject to more victimization. In particular, a public lifestyle consisting of daytime work outside the home or frequent night time activity away from home would increase exposure to risk, and consequently, crime

Williams and McShane (1994) state that for any crime to occur the circumstances must be such that nobody or nothing should or must distract the motivated offender. Cohen and Felson (1979) refer to capable guardians as ordinary citizens going about their daily routines as well as mechanical devices such as locks, alarms and security cameras. In other words, it involves ordinary people enacting informal social control through watching and sanctioning.

Despite widespread popularity, it was not until 1995 that criminologists began to test the applicability of routine activity theory specifically on women's victimization. (Franklin et al, 2011).

Cohen and Felson introduced the routine activities theory in 1979, which explains the influence of routine daily activities (and their structure) on criminal opportunity (Cohen and Felson, 1979). Similar to the lifestyle theory, routine activities explain victimisation by exploring the social processes that increase risk of victimisation (Gover, 2004). There is a spatial and temporal

interdependence of criminal acts (Cohen and Felson, 1979; Gover, 2004; Mesch, 2000). Routine activities theory suggests that victimisation risk is influenced by lifestyle patterns (Brown et al., 2010). Cohen and Felson define routine activities as “any recurrent and prevalent activities which provide for basic population and individual needs, whatever their biological or cultural origins” (Cohen and Felson, 1979).

Central concepts within the approach are opportunity, proximity or exposure, and facilitating factors (e.g. absence of a capable guardian) (Fattah, 1991; Fattah, 2000). Cohen and Felson (1979) further point out that social structure and trends in social conditions can influence the convergence of elements, and that, unfortunately, an improved quality of life can increase risk of victimisation (Cohen and Felson, 1979; Wilcox, 2010). Felson (1998) later introduced a fourth element, namely the absence of an intimate handler (a person capable of persuading an offender against committing a crime and applying informal social control due to an emotional or legal attachment). In his extension of the routine activities theory, Felson applies the approach not only to exploitative offenses but also to mutualistic, competitive and individualistic offenses (Felson, 2002); Saponaro, 2013).

3.7. Routine Activities Approach

According to Cohen and Felson, the focus of the routine activities approach is to explain how the spatial-temporal organising of social activities contributes to the translation of criminal propensities into criminal actions.

This approach argues that crime is a product or result of an opportunity that presents itself during a social activity. Cohen and Felson describe these activities as any recurrent and prevalent activities which provide for basic population and individual needs, whatever their biological or cultural origins. This includes formalised work, the provision of food and shelter, the gratification of sexual needs, leisure, social interaction and learning and child rearing.

Routine activities and specifically changes in activity patterns often create the opportunity for crime or increase the risk of direct contact between the offender and the person or object which the offender attempts to take or damage. This is because it brings together 3 elements namely; a motivated offender, a suitable target and the absence of a capable guardian at a given place and

time (See figure 1 below). The presence of these three components increases the likelihood that a crime will be committed (Burke, 2009).

Figure 5: Routine Activities Theory



3.7.1. Motivated offender

Motivated offenders are individuals who are willing and capable of committing a crime. (Cohen and Felson, 1979). The motivation differs in every individual. Some may commit a crime out of excitement, for financing needs or to support a drug addiction. Motivated offenders weigh their cost benefit analysis as stated by the rational choice perspective. If they discover that the reward is greater than the consequences, this motivates them more to commit the crime.

3.7.2. Suitable target

Four components contribute to when an offender regards a target as suitable, namely;

- The value, physical visibility, accessibility and the ease in target can be acquired
- The financial and symbolic value of a target influences the desirability
- The visibility is related to the perceived risk to be observed

- The accessibility is the ease in which the offender can approach the target without attracting attention and the ease refers to ease in which a target can be acquired.

The mass of moveable property and the victim's ability to be violent is considered here. Routine activities have a significant effect on the suitability of a target. The reason for this is that a routine pattern of behaviour may increase the visibility and accessibility of people or property at a specific time.

Felson and Cohen describe protection as and spatial-temporally specific supervision of people or property by other people, which may prevent a crime due to their presence. They also suggested that technological aids can also fulfil the role of a guardian. They also refer to crime hot spots, where fewer people visit these areas and as a result of the absence of guardianship offenders identify more individuals as targets.

Cohen and Felson (1979) stress that crime does not take place coincidentally and that the social structure in society contribute to criminal tendencies becoming acts of crime, also contributed to crime prevention. Shows explanation decreases in certain areas.

In terms of the motivated offender element, the routine activities theory assumes a certain presence of offender motivation or criminal inclination and the offender's ability to act on such inclinations (Cohen and Felson, 1979; Tibbets, 2012). Cohen and Felson's (1979) primary focus on understanding crime in terms of variations in elements such as a suitable target and absence of a capable guardian, is backed up by their assumption that motivated offenders are key (Wilcox, 2010). In accordance with the theory, offender(s) are reasoned criminals who make the choice to victimise the victim when the opportunity presents itself (humans' hedonistic nature). The crime thus requires both the victim and offender to play a role (Brown, et al., 2010; Tibbetts, 2012).

Target suitability is the second element within the 'chemistry for crime' and involves the availability of something a potential offender evaluates as valuable, whether it is valuable property, the opportunity for excitement, or the possibility of executing an act that may be emotionally gratifying, appealing to an individual's hedonistic nature (Brown et al., 2010). A target's suitability, such as his or her temporal and spatial characteristics, can be affected by routine production and daily activities (e.g. spatial/temporal features of school, work and leisure activities)

(Cohen and Felson, 1979). A suitable target is determined by four factors (Burke, 2009; Cohen and Felson, 1979; Newburn, 2013; Saponaro, 2013):

- Value (the symbolic/material worth of the target, whether personal or property, subjectively perceived by a rational potential offender).
- Physical visibility (the opportunity for potential offenders to watch/view and identify the target).
- Accessibility/attainability (the ability of the potential offender to approach/gain access to the target with ease and without drawing unwanted attention, increasing the risk of attack).
- Inertia/effortlessness (the simplicity by which the potential offender can obtain the target, taking into account the mass/size of the target and the target's physical ability to oppose or remove the offender).

3.7.3. Capable Guardian

With regards to the third element, absence of a capable guardian, the form of a 'guardian' depends on the context. A capable guardian can be any spatial-temporal form of oversight that offers deterrence against criminal violations (Brown et al., 2010; Saponaro, 2013). Absence of a capable guardian thus refers to the absence of a person or other agent that can protect the target against an offender, or deter a criminal event. A capable guardian can be a person, animal or object, security measures or safeguards, technological aids, and even programmes or policies implemented to prevent and deter violence (Brown et al, 2010; Newburn, 2013; Saponaro, 2013; Tibbetts, 2012). Furthermore, the situations and locations in which targets place themselves have an impact on the risk of victimisation (Burke, 2009).

Routine activities can occur both within and outside the home environment (e.g. vocational or leisure activities). The theory itself was tested in its application to the household activity ratio and variations in predatory crime rates. Results indicated that activities occurring outside the household (non-household, non-family activities) are at higher risk of criminal victimisation (Cohen and Felson, 1979). Additionally, Cohen and Felson (1979) applied the theory to changing crime patterns in the United States, finding that the increase in crime rates could be attributed to an

absence of guardianship at home, as women have increasingly entered the labour market since 1960. Results thus pointed out that crime rates were influenced by changes in the social structure of society (Saponaro, 2013).

The contribution made by the routine activities theory was its explanation of the manner in which situational and environmental factors in combination with routine activities could influence proneness to victimisation and, in turn, explain variations in crime rates. Further contributions of the theory include providing a framework against which crime patterns can be examined, an emphasis on the roles all actors play in the execution of a criminal event, and its crime prevention potential in situational alterations and precautions (Saponaro, 2013). The approach has additionally been utilised in studies on victimisation vulnerability of certain groups in the United States, victimisation risk factors in child abduction and child homicide, and victimisation risk of clergy members (Burke, 2009). The approach has also had modern applications, such as its use in geographic profiling (Tibbets, 2012). Recent studies have further applied the approach in examining deviance and how it relates to poor oversight of young adults' socialisation, as well as further exploring the part extra-curricular activities, substances and sororities play in deviance (Gilbertson, 2006; Jackson et al., 2006).

Crime statistics did not suddenly arise in post-apartheid South Africa as crime statistics were never accurately recorded. The new South Africa appears to indicate an increase in the crime rate which has occurred with the change in the type of crime recorded in official statistics. Crime movement in terms of patterns, locations and targets changed as crime was democratised and there were many more suitable targets. Against this backdrop the recorded incidence evidences that the nature and extent of ATM crime is evolving and ATM crime could become or already be a catalyst to more serious offences. (South African Banking Risk Information Centre, 2015)

ATM users are directed to in terms of location is critical in ensuring the user does not become a suitable target. The positioning of an ATM has to be considered from the user's safety perspective and not just convenience. Some of the variables in understanding what make a location a risk to the user is routine behaviour and absence of guardianship. The convergence of a likely offender and suitable target in the absence of guardianship contributes to the opportunity for crime.

A higher rate of incidents accessed in South Africa leans towards trickery. Trickery by way of confusion, chaos whilst the ATM user is at the ATM or sleight of hand. Once the pin is divulged the user has become a victim. Why would you trust an unbeknown person to assist at the ATM as should a user be knowledgeable on the use of the device no assistance would be sought or accepted. The lack of education resulting in a lack of confidence, could be a motivating factor why users create the opportunity to be assisted at the ATM by unknown third party criminals.

An economy poised for a recession will always be a contributor to economic crime which makes the ATM user susceptible to becoming a victim for financial gain. The effects of a recession speaks to unemployment together with a high inflation and taxed economy. A likely offender is less likely to commit an offence if they could legitimately attain goal.

Certain limitations have been pointed out. The theory assumes a certain level of offender motivation and fails to further explore factors that motivate offenders to commit criminal acts (Burke, 2009; Saponaro, 2013). It also fails to explain white-collar crime and places misconstrued expectations on victims to alter their lifestyle, shifting blame from the offender onto the victim and his/her lifestyle (Saponaro, 2013). Further limitations include the passivity and simplicity of the theory, the broad scope of 'routine activity', single measures of key concepts, and inconsistency between the nature of violent crimes and 'rational behaviour', as stipulated in the abovementioned theory (Fattah, 1991).

As already discussed the lifestyle exposure theory and routine activity theory emphasize how patterns of routine activities or lifestyles in conventional society provide an opportunity structure for crime. Each theory also downplays the importance of offender motivation and other aspects of criminality in understanding individuals' risks of victimization and the social ecology of crime. These theories are also representative of a wider "criminal opportunity" perspective because they stress how the availability of criminal opportunities is determined, in large part, by the routine activity patterns of everyday life (Cohen 1981; Cohen and Land 1987). The fundamental differences between these theories are in terminology and in the fact that routine activity theory was originally developed to account for changes in crime rates over time whereas lifestyle-exposure theory was proposed to account for differences in victimization risks across social groups. Over the past decade, however, each theory has been applied across units of analysis and

in both cross-sectional and longitude. Both of the above-mentioned theories (lifestyle/exposure model and routine activities theory) focus on the affiliation between lifestyle and routine activities, their rate of victimisation, and the most likely avenues through which such victimisation could take place.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1. Introduction

This chapter attempts to conceptualise the research design and methodology of the present study, and provides reasons for the relevant choices that seek to answer the research questions and achieve the objectives of the study. Firstly, the research design provides the plan or blueprint for the collection, measurement and analysis of data. Secondly, it enables the researcher to anticipate the appropriate research design, to ensure the validity of the final results. Further it integrates the various components of the study in a coherent and logical way, ensuring that the researcher effectively addresses the research problem.

Hence the research design in this study was a cross-sectional survey used to guide the appropriate research methods to achieve the aims and objectives set out in Chapter One namely: a. to analyse safety experiences in a select sample of women ATM users in the eThekweni municipality and b. to make recommendations based on the identified trends. This chapter further provides a detailed account for the choice of research design, choice of methods, sampling strategy, procedures (or techniques) that were employed in answering the following research question: what are women's safety concerns when using ATM's in the eThekweni municipality.

4.2. Research Design

A cross-sectional survey collects data to make inferences about a population of interest (universe) at one point in time. Cross-sectional surveys have been described as snapshots of the populations about which they gather data. The design was used as a type of observational study that analysed data collected from a questionnaire from a representative subset, at a specific point in time.

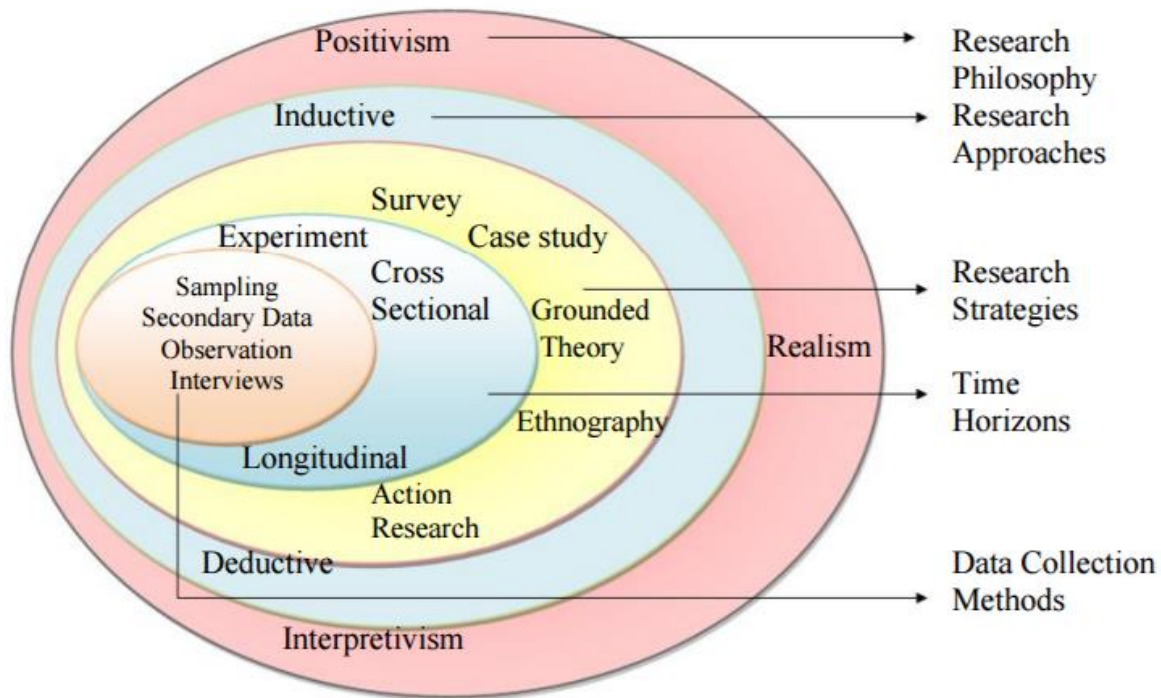
Research design can be thought of as the logic or master plan of a research that throws light on how the study is to be conducted. It shows how all of the major parts of the research study– the samples or groups, measures, treatments or programs, etc– work together in an attempt to address the research questions. Research design is similar to an architectural outline. The research design can be seen as actualisation of logic in a set of procedures that optimises the validity of data for a given research problem. According to Mouton (1996) the research design serves to “plan, structure

and execute” the research to maximise the “validity of the findings”. It gives directions from the underlying philosophical assumptions to research design, and data collection. Yin (2003) adds further that “colloquially a research design is an action plan for getting from here to there, where ‘here’ may be defined as the initial set of questions to be answered and ‘there’ is some set of (conclusions) answers”

4.3. The Research Approach

In his more recent writing Creswell (2014) proposes that approach to research involves philosophical assumptions as well as distinct methods or procedures. The broad research approach is the plan or proposal to conduct research, involves the intersection of philosophy, research designs, and specific methods. The research approach adopted in this study is a Quantitative one which Creswell (2014) proposes “is an approach for testing objective theories by examining the relationship among variables.” The research approach was also informed by Creswell’s (2003) representation of the sequence of decision levels in the research process illustrated in Figure 1. These are, the philosophical basis or paradigm (Kuhn 1996) underpinning the knowledge claims, followed by aligned strategies of inquiry or approaches to the research and finally appropriate data collection and analysis design. He further demonstrates that “These variables, in turn, can be measured, typically on instruments, so that numbered data can be analysed using statistical procedures.”

Figure 6: The Research process (Creswell's (2003:5) model of research decision levels)



Although several researchers such as (Lincoln, Lynham, and Guba, 2011; Mertens,2010); refer to “a basic set of beliefs that guide actions” as paradigms Creswell has chosen to use the term worldview. In his seminal work “The structure of Scientific Revolutions” Kuhn coined the term “paradigm” cited in Collins (1996) and in Kuhn (1996). Thomas Kuhn defined paradigms as “universally recognized scientific achievements that, for a time, provide model problems and solutions for a community of researchers.”

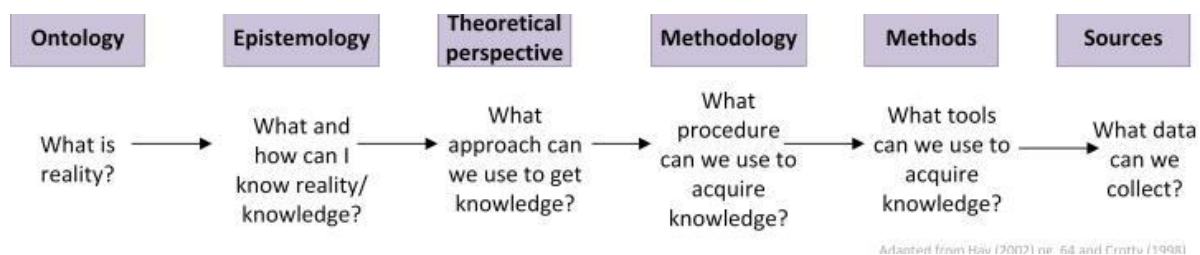
Kuhn (1996) further asserts that, although shared rules and assumptions may be derived from paradigms, they are not necessary for research to be conducted. However, having assumptions and rules associated with paradigms does offer a tidy framework for scientific investigation, as well as offering a source of justification for decisions made in the research process (Carmichael). Creswell's (2014) view that “worldviews arise based on discipline orientations, students' advisors/mentors inclinations, and past research experiences.” He adds that “The types of beliefs held by individual researchers based on these factors will often lead to embracing a qualitative,

quantitative, or mixed methods approach in their research”. Collins’ (1996) view that paradigms represent a way of thinking or frame of reference is both simple and useful – one that is taken as the default meaning of the word when used in this study (Carmichael,)Lather (1986a: 259) purports that research paradigms inherently reflect our beliefs about the world we live in and want to live in. Guba (1990), an authority on research methodology maintains that research paradigms may be characterised through their:

- Ontology – What is reality?
- Epistemology – How do you know something?
- Methodology – How do you go about finding it out?

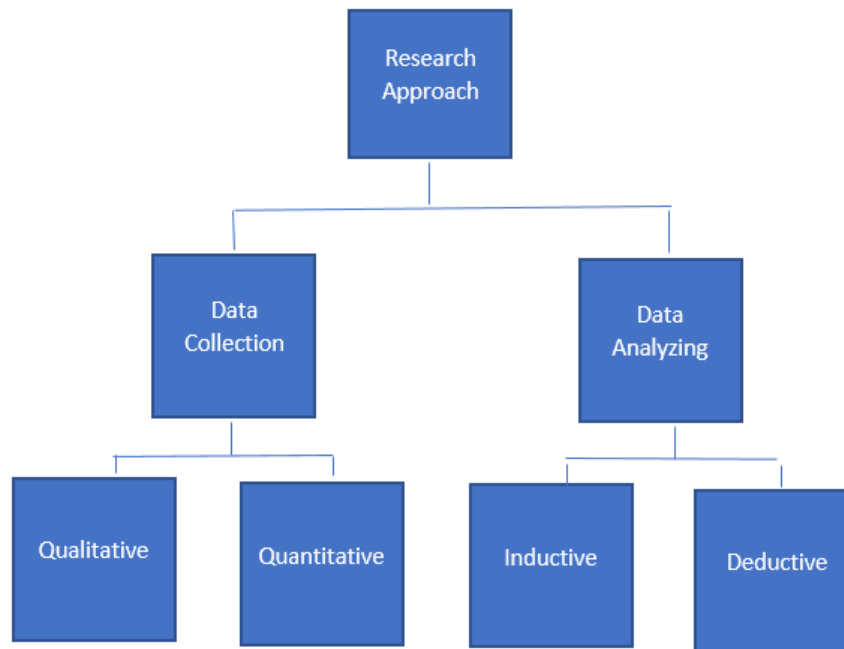
In the diagram below (Patel, 2015) explains the above terms and the relationship between them:

Figure 7.a: Characteristics of Research paradigms



The research approach for this study is illustrated in the diagram below:

Figure 7.b: Research Approach



Quantitative research consists of those studies in which the data concerned can be analysed in terms of numbers. Quantitative research is based more directly on its original plans and its results are more readily analysed and interpreted (Best and Khan, 1989: 89-90)

The quantitative nature of the current study favoured positivism. Positivists believe that there is a single reality, which can be measured and known, and therefore they are more likely to use quantitative methods to measure this reality (Patel, 2015). According to the positivist ontology there is a single, external and objective reality to any research question regardless of the researcher's belief (Carson *et al.* 1988; Hudson and Ozanne 1988). Therefore they (positivists) take a controlled and structural approach when doing research. They achieve this by identifying a clear research topic, creating appropriate hypotheses and choosing a suitable research methodology (Churchill, 1996; Carson *et al.*, 2001). According to Walsham (1995b) the positivist position maintains that scientific knowledge consists of facts while its ontology considers the reality as independent of social construction. If the research study consists of a stable and unchanging reality, then the researcher can adopt an 'objectivist' perspective: a realist ontology - a belief in an objective, real world - and detached epistemological stance based on a belief that

people's perceptions and statements are either true or false, right or wrong, a belief based on a view of knowledge as hard, real and acquirable; they can employ methodology that relies on control and manipulation of reality.

Carson *et al.*, (2001) add that positivist researchers do not get emotionally engaged with their participants. In their view the researcher is ideally an objective observer who neither participates in nor influences what is being studied. The researcher also maintains a clear distinction between science and personal experience and fact and value judgement. It is also important in positivist research to seek objectivity and use consistently rational and logical approaches to research (Carson *et al.*, 2001). Statistical and mathematical techniques are central to positivist research, which adheres to specifically structured research techniques to uncover single and objective reality (Carson *et al.*, 2001). The goal of positivist researchers is to make time and context free generalizations. They believe this is possible because human actions can be explained as a result of real causes that temporarily precedes their behaviour and the researcher and his research subjects are independent and do not influence each other (Hudson and Ozanne, 1988). Accordingly, positivist researchers also attempt to remain detached from the participants of the research by creating distance between themselves and the participants. They practice this because to make clear distinctions between reason and feeling as well as between science and personal experience. Positivists also claim it is important to clearly distinguish between fact and value judgement. As positivist researchers they seek objectivity and use consistently rational and logical approaches to research (Carson *et al.* 2001; Hudson and Ozanne 1988).

The means of enquiry and approach were Quantitative. The survey design in the form of questionnaires was used for this study and administered through snowball sampling among women ATM users in the eThekweni municipality. The SURVEY involved the administration of a Questionnaire which sought to obtain data on perceptions of safety and recommendations for safer ATM facilities. SURVEYS using Questionnaires were easier to administer. It assured confidentiality and were effective in providing information in a relatively brief time period at low cost to the researcher (Robson, 1993). The biographical data collected from respondents verified the stratified sampling procedure (discussed earlier) used in the study.

4.4. Reliability Statistics

The two most important aspects of precision are reliability and validity. Reliability is computed by taking several measurements on the same subjects. A reliability coefficient of 0.60 or higher is considered as “acceptable” for a newly developed construct.

The table below reflects the Cronbach’s alpha score for all the items that constituted the questionnaire.

Table 2: Cronbach’s alpha score

		N of Items	Cronbach's Alpha
B	Feelings of Vulnerability	3	0.659
C	Safety and Security	9	0.570
D	Awareness	4	0.624

The reliability scores for all sections exceed or approximate the recommended Cronbach’s alpha value. This indicates a degree of acceptable, consistent scoring for these sections of the research.

4.5. Sampling

Sample is a portion of population or universe. Sampling however is a process of selecting a small portion or part of the population to represent the entire or target population. Researchers can select participants by random selection or random sampling. With random selection or random sampling, each individual has an equal probability of being selected from the population, ensuring that the sample will be representative of the population (Keppel and Wickens, 2003). In many experiments, however, only a convenience sample is possible because the investigator must use naturally formed groups (e.g., a classroom, an organization, a family unit) or volunteers. When individuals are not randomly assigned, the procedure is called a quasi-experiment (Cresswell, 2014). Probability sampling is defined as having the “distinguishing characteristic that each unit

in the population has a known, nonzero chance of being included in the sample” [8]. It is described more clearly as “every participant has an equal probability of being selected” from the population [6]. In probability sampling, each element in the population has a known nonzero chance of being selected through the use of a random selection procedure [1]. In nonprobability sampling, randomization is not important in selecting a sample from the population of interest. In this method inclusion is dependent on the judgment of the researcher hence it is by ‘choice’ not ‘chance’. Participants do not have an equal chance for inclusion in the sample. The researcher chooses the sample. Rather, subjective methods are used to decide which elements are included in the sample. Hence, nonprobability sampling is a sampling technique where the samples are gathered in a process that does not give all the participants or units in the population equal chances of being included. The sampling technique employed in the current study is snowball sampling as per (1) Comparison of Snowball Sampling and Purposive Sampling (Ilker, 2016).

The researcher chose non-probability sampling as the current study is exploratory and the phenomenon being investigated is not clearly known. It also allowed the researcher to include participants who volunteered but provided the information needed to gain insight into women’s perceptions of safety when using ATM’s. In employing this type of sampling in addition to its being cheaper and time efficient, rules and procedures were easier to implement.

Snowball sampling is a non-probabilistic sampling technique applicable to qualitative or quantitative studies, although it is most frequently used in quantitative studies. In snowball samples, subjects are more readily accessible to the researcher and are more likely to be included. Thus, in quantitative studies, opportunity to participate is not equal for all qualified individuals in the target population and study results are not necessarily generalizable to this population. As in all quantitative studies, increasing the sample size increases the statistical power of the convenience sample ([A comparison of convenience sampling and purposive sampling] Suen LJ1, Huang HM2, Lee HH3 2014 Jun; 61(3):105-11. doi: 10.6224/JN.61.3.105. Etikan (2017) maintains that snowball sampling is a form of Nonprobability Sampling Technique that a researcher uses to choose a sample of subjects/units from a population. He adds that although, Nonprobability sampling due to the subjective nature in choosing the sample is not a good representative of the population, it is useful especially when randomization is impossible like when the population is very large.

This has been the case in this study. Identifying women ATM users from approximately 10 million users that would be representative was impossible. This sampling technique was useful also because the researcher had limited resources and time. Further the research does not aim to generate results that will be used to create generalizations pertaining to the entire population. Other drawbacks of convenience sampling include high vulnerability to selection bias and high level of sampling error. Nonetheless snowball sampling was most appropriate to achieve the aim of the study during a limited time period. This method allowed the researcher to send the google link to the online questionnaire to individuals, who were identified by a fellow participant, via the researcher's mobile phone, email or Facebook. This was the easiest and the most convenient way to recruit participants. Major advantages of this method were convenience and immediate preliminary data analysis. Participants could complete the questionnaire in their time of choice and mode of technology eg laptops; iphones or desktops.

The researcher kept a close watch on the race of participants as the researcher aimed for an equal number of participants per race group. Hence once 25 participants from the four major race groups was achieved the researcher intercepted participation of this group. The total sample size was one hundred participants made up of African, Indian, white and coloured women ATM users. All participants had to be ATM users and had to reside in the eThekweni municipality. For inclusion in the study participants had to be between 18 and 65 years of age as this is the working age group for women.

The data was collected during June and July 2017. The online survey through which the data was collected provided flexibility as participants received the survey via several formats such as e-mail with a link to the survey URL via iPhone. Administration of the surveys was time efficient. Archer (2003) eloquently sums up many of the advantages and potential disadvantages of online surveys versus mail surveys.

He maintains that online surveys virtually eliminate the use of paper, postage, mail out, and data entry costs. He further acknowledges that online surveys reduce implementation time and surveying costs once an electronic data collection system developed is in place. Archer also points out that data display and tabulation are simultaneous with completion of surveys. Once the survey is completed graphically and numerically formatted data are immediately available. A further advantage is the simplicity of importing data into data analysis programs. This notion is supported

by Kannan et al. (1998) who concluded that the speed and global reach of the internet allow real-time access for interactions with geographically diverse respondent groups and information servers. Broadband access to the internet also facilitates the transmission of multimedia content – due to the speed of downloads, which enhances the scope and richness of online surveys. These factors have led to innovative internet-based techniques such as online focus groups, chat rooms, and bulletin boards; these participants interact with each other and the interviewer/facilitator in a multimedia setting.

Using an online survey also allowed participants to respond at a convenient time for them. The nature of the survey further provided the option for participants to take as much time as they required to answer individual questions. As Hogg (2003) notes, instead of being annoyed at an inconvenient time with a telephone survey, a respondent can take an online survey whenever he or she feels it is convenient.

Online surveys also have potential limitations. They could be perceived as junk mail. Participants could have doubts of its legitimacy even if an e-mail comes from a trusted source. Participants who experience dial up connections or need to purchase data may not participate even after agreeing to participate. If instructions are unclear participants may abandon the study. Privacy and security issues may be a concern for prospective participants in terms of how the data will be used how data will be used.

They may also be hesitant to open e-mail attachments for fear that they may be infected with a virus. Other potential online disadvantages that Archer (2002) highlights include lack of internet connectivity so online surveys will not work with some populations; limited computer literacy among some potential participants; varied screen configurations; challenges with sampling e-mail addresses; and the quicker, sometimes instantaneous, decision not to respond.

The software program used to analyse the data was Statistical Package for Social Science (SPSS) which is a widely used software program for data analysis among academics. SPSS allows for various statistical analysis to be performed including descriptive and inferential analysis also used in the current study. These statistical analyses helped to make the results robust and provided important insights about the data. They also allowed the researcher to examine whether the collected data was relevant in fulfilling the aims and objectives of the research.

The methods and instruments of data gathering can present limitations. Researchers must be cautious in the selection of methods and instruments, as the narrow focus of some methods may be limiting.

In addition to the methods used for data collection, the time in which data are collected may present certain challenges, as delays might occur. Such delays may be due to time availability, willingness to participate and comprehension and understanding. As seeking information on banking use could be seen as sensitive the researcher decided to use questionnaires to generate data because of its objectivity and impersonal nature. Both of these are consistent with quantitative research characteristics.

4.6. Ethical considerations

As per any research study this study followed strict ethical processes.

In terms of protection of the participants the researcher drew from social sciences ethical considerations. Ethical considerations vital to the present study were; voluntary participation, informed consent and privacy and anonymity of participant. These ethical considerations have their roots in the Nuremberg Code. Conventional wisdom holds that a major driver of the Nuremberg Code was the Nuremberg Trials post 1945 that accused physicians of torturing, brutalizing, crippling and murdering thousands of victims in the name of research. Consequently, The Helsinki Declaration was formulated to protect research participants. This research had minimal risks associated with it. Fortunately, because The British Psychological Society's approach is that when working with vulnerable groups the researcher must ensure they are given ample opportunity to understand the nature, purpose, and anticipated consequences of their research participation, so that they may give informed consent to the extent that their capabilities allow The British Psychological Society code of (2009). Nevertheless as mentioned by Iphoren (2011) the present research study adhered to the following ethical guidelines (guided by the University of KwaZulu Natal Ethical procedures):

The objective of the research namely ascertaining women's perceptions of safety as ATM users aimed at improving safety and security at ATM's. This was done with little to no harm to

participants since the questions did not require personal information nor were participants required to travel to complete the questionnaire.

All participation in the study was voluntary as participants were relatively unknown. Participants were by the communication outline aware and made to understand the nature of their participation, the objective of the research and the benefits to them. Once they participant was satisfied with the survey link, the link was accessed and questionnaire completed. The link assured anonymity as their identities and personal details would not be made publicly available. Participants were further assured, either by cell phone, email or Facebook,:

- Prior and after completion even the researcher would not be able to retrace responses to any of them because of the manner in which the questionnaire was designed and electronically completed.
- Their privacy as the questionnaire did not seek any sensitive information like names, identification numbers, bank branch, bank codes or any account details.
- Details of the University Ethics Office should they believe that the researcher was conducting herself without integrity and or transparency.
- There was no payment for participation but the results of the study would be shared with them via the researcher's Facebook page and community newspapers once the results were analysed and approved by the university.

In his cutting edge paper entitled "The ethics of research in the social sciences: an overview" Houston (2016) reminds us of the importance of ethics in social science research. He does this by quoting various researchers in the field. He draws attention to Oakes (2002) argument that "Social scientists do not have an unalienable right to conduct research involving other people." He further highlights the work of AAAS, (1995) Jorgensen, (1971); Mitchell and Draper, (1982); PRE, (2002) and Walsh, (1992) where they contend, "Ethical behaviour may help assure the climate of trust in which we continue our socially useful labours. Finally Houston shares Israel and Hay's wise words with us "If we act honestly and honourably, people may rely on us to recognize their needs and sensitivities and consequently may be more willing to contribute openly and fully to the work we undertake (Israel and Hay, 2006: p3).

4.7. Conclusion

This chapter discussed the research methodology of the study and described the research design, population, sample, data-collection instrument and ethical considerations. Chapter 5 covers the statement of findings, interpretation and discussion of the primary data.

CHAPTER 5: STATEMENT OF FINDINGS, INTERPRETATION AND DISCUSSION OF THE PRIMARY DATA

5.1. Introduction

This chapter presents the results and discuss the findings obtained from the questionnaires in this study. The questionnaire was the primary tool that was used to collect data and was distributed to women in eThekweni municipality. The data collected from the responses was analysed with SPSS version 24.0. The results will present the descriptive statistics in the form of graphs, cross tabulations and other figures for the quantitative data that was collected. Inferential techniques include the use of correlations and chi square test values; which are interpreted using the p-values.

5.2. The Sample

In total, 100 questionnaires were despatched and 100 were returned which gave a 100 % response rate. Although the sample is not enough to make generalisations it is able to provide some baseline data. In addition, the study is exploratory in nature so it is not the intention of this study to make generalisations. The data was generated to provide first insights into the topic given that this specific research focus has not been previously explored. The data further provides insight on what future studies should focus on. The data has provided insight on the variable (women) that the study was concerned with.

5.3. The Research Instrument

The research instrument (part of a bigger project) consisted of 29 items, with a level of measurement at a nominal or an ordinal level. The questionnaire was divided into 4 sections which measured various themes as illustrated below:

- A Biographical data
- B Feelings of Vulnerability
- C Safety and Security
- D Awareness

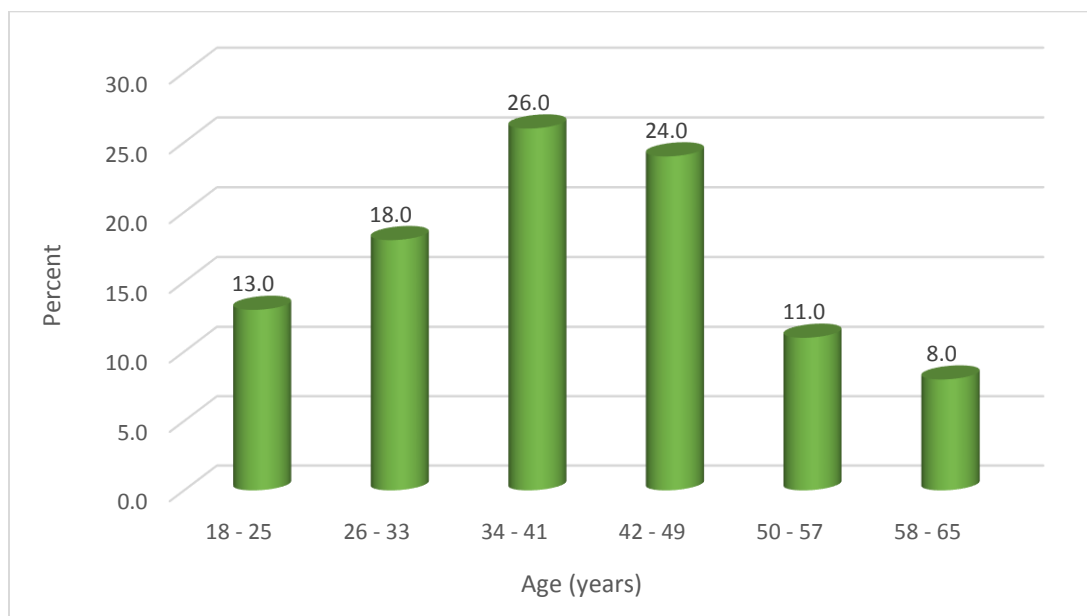
For the purpose of this study only 4 questions were chosen as it was adequate to fulfil the aim and objectives of this study.

5.3.1. Biographical Data

This section summarises the biographical characteristics of the respondents.

Table 3: Gender distribution by age

The table below describes the overall gender distribution by age.



The spread by age was not uniform, with two-thirds of the respondents (68%) being between 26 and 49 years old, with the remaining respondents having similar numbers at the younger and older ends ($p = 0.007$). This ununiformed pattern was probably the result of snowball sampling (discussed fully in chapter four) employed in the study. Nonetheless this age pattern has no impact on the aims and objectives of the study.

Table 4: Racial Distribution by Age

	Frequency	Percent
African	25	25.0
Coloured	25	25.0
Indian	25	25.0
White	25	25.0
Total	100	100.0

The table above demonstrates the racial distribution of the participants. The sample constituted the same number of participants in each of the 4 main race (African, Coloured, White and Indian) groups.

The table below indicates the regions in which the respondents lived (banked).

Table 5: Regions respondents lived (banked)

	Frequency	Percent
Durban – South	5	5.0
Durban – West	2	2.0
eThekwini - Durban	78	78.0
North Coast	7	7.0
Pinetown	4	4.0
Unspecified	34	4.0
Total	100	100.0

More than three quarters of the respondents (78.0%) were from the eThekwini - Durban region ($p < 0.001$). eThekwini, regarded as the Central Business District, is a highly populated area due to its high economic activity. Thus where there is high economic activity one would expect high population levels in comparison to other regions which are located further away from the CDB. This pattern (Table 2) is very much expected.

The following section provides explanations of the descriptive statistics generated for the study. These statistics are in the form of cross tabulations.

Table 6: Respondents awareness of precautions to take at an ATM

		I am aware of precautions to take at an ATM									
		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %
Please select your age	18 - 25	0	.0%	1	1.0%	0	.0%	9	9.0%	3	3.0%
	26 - 33	0	.0%	0	.0%	1	1.0%	16	16.0%	1	1.0%
	34 - 41	0	.0%	1	1.0%	4	4.0%	12	12.0%	9	9.0%
	42 - 49	1	1.0%	0	.0%	1	1.0%	17	17.0%	5	5.0%
	50 - 57	0	.0%	0	.0%	1	1.0%	5	5.0%	5	5.0%
	58 - 65	0	.0%	0	.0%	0	.0%	2	2.0%	6	6.0%
Please select your race	African	0	.0%	2	2.0%	3	3.0%	15	15.0%	5	5.0%
	Coloured	1	1.0%	0	.0%	3	3.0%	15	15.0%	6	6.0%
	Indian	0	.0%	0	.0%	1	1.0%	15	15.0%	9	9.0%
	White	0	.0%	0	.0%	0	.0%	16	16.0%	9	9.0%
Name of main Banking institution	ABSA	0	.0%	0	.0%	1	1.0%	10	10.0%	5	5.0%
	Capitec	0	.0%	0	.0%	1	1.0%	5	5.0%	1	1.0%
	First National	0	.0%	0	.0%	0	.0%	18	18.0%	6	6.0%
	Investec	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%
	Nedbank	0	.0%	2	2.0%	1	1.0%	9	9.0%	5	5.0%
	Standard	1	1.0%	0	.0%	4	4.0%	19	19.0%	11	11.0%

Table 6 above shows that participants are aware of precautions to take irrespective of age, race or banking institution. First National and Standard Bank participants scored the highest in terms of agreeing with their level of awareness. Their scores were 18 and 19 % respectively. These two banking institutions scored the highest in the strongly agree category with Standard Bank leading with 11 % and First National Bank scoring 6 %. ATM crime in general has a profound impact on its victims. Interestingly in Sewpersad and Minnaar's (2010) research on ATM safety they found site audits made reference to ATMs with similar security or lack thereof. In these site audits the criteria assessed were lighting, CCTV Surveillance, Customer awareness information, Panic/alarm buttons, ATM Alarm, Presence of a Security guard, ATM intercom, Alarm system for in store ATM's, fence, bollards and roller shutter doors.

Nonetheless their research highlighted inconsistencies in security application of minimum security requirement at ATMS if any exist at all. In terms of feelings of (in) security Avila et al. (2016) purport that the experience of victimization implies a greater perception of insecurity. Although South Africa has made some good strides in terms of seeing a reduction in some categories of crime South Africans still feel that violent and property crime is increasing which has an impact on lifestyle. In some neighborhoods the majority of households don't feel safe to walk alone in parks or allow their children to play freely in their neighborhoods according to Statistics South

Africa's (Stats SA) Victims of Crime Survey (VOCS). However, the climate of insecurity in South Africa pervades a large number of citizens. Given that crime in South Africa is high and as mentioned earlier is often gendered again demonstrates the importance of investigating in depth the roles of both genders in the perception of insecurity and changes in routines. Zarabi (2013) conducted a study, in which 8,170 subjects participated, to understand the relationships between victimization, perception of insecurity, and changes in routines between men and women. The participants comprised victims and non-victims. In his findings Zarabi ascertained significant gender differences on victimization in terms of perception of insecurity, restrictions on everyday activities, and protection measures. Among women participants (victims) there was significant restrictions in their everyday activities in comparison to non-victims.

In a Making Safer Places projects, initiated in the late, nineties, Slusky, (2004) sought to find out how changes to the physical environment might help women to recover the right to use public spaces voluntarily (Slusky, 2004). Slusky draws attention to the possibility that while many women may not have questioned the social factors that have contributed to their fears, the process of engaging with these issues through discussion with other women led many of Slusky's participants to join groups and organizations working to change the relations between the genders and the social frameworks that perpetuate them (Williams, 2000). Further However the Code of Banking Practice (2012) sets out inter alia minimum standards between the bank and customer, fostering customer confidence in the banking system. A major gap in the code however is its failure to acknowledge customer safety generally at ATM's or women as vulnerable customers at ATM. Thus the code does not provide minimum standards for women ATM users/customers.

In terms of safety it was not until late 2016 that the Banking Association of South Africa, which represents the banking industry, advised users of risks at the ATMs and tips to avoid becoming a victim of ATM fraud (Banking Association of South Africa 2016). Nonetheless the table below captures ATM safety tips to users.

Table 7: ATM safety tips

The Banking Association of South Africa, which represents the banking industry, predominantly advise users of risks at the ATMs and tips to avoid becoming a victim of ATM fraud (Banking Association of South Africa 2016)

<ul style="list-style-type: none">• Use ATM's where you are comfortable.
<ul style="list-style-type: none">• Avoid using the ATM where you feel unsafe by suspicious-looking individuals who are in the vicinity.
<ul style="list-style-type: none">• Be prepared (card in hand) on approaching the ATM.
<ul style="list-style-type: none">• Avoid using ATM's if it appears to be tampered with or damaged.
<ul style="list-style-type: none">• Refrain from seeking the assistance of strangers at an ATM, especially when you are challenged with completing a successful transaction
<ul style="list-style-type: none">• Do not expose the ATM keypad to allow other users to view your pin when you enter it.
<ul style="list-style-type: none">• Never disclose your pin to anybody, not even to the bank or police.
<ul style="list-style-type: none">• If you experience challenges processing your transactions Press the Cancel key, withdraw your card and visit another ATM
<ul style="list-style-type: none">• Contact your bank and/or police if your card gets jammed, retained or lost, or if someone interferes with you at an ATM by using the help line and/or nearest phone.
<ul style="list-style-type: none">• Never feel pressurised to hastily conclude your ATM transactions. On concluding your transaction make sure you have your card, slips and or money carefully secured in your wallet, handbag or pocket before leaving the ATM.

Table 8: Respondents feelings of safety when using an ATM with a guard

		I prefer using ATM's where only a security guard is present									
		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %
Please select your age	18 - 25	0	.0%	0	.0%	5	5.1%	7	7.1%	1	1.0%
	26 - 33	1	1.0%	2	2.0%	3	3.0%	5	5.1%	6	6.1%
	34 - 41	2	2.0%	4	4.0%	5	5.1%	10	10.1%	5	5.1%
	42 - 49	0	.0%	4	4.0%	7	7.1%	12	12.1%	1	1.0%
	50 - 57	0	.0%	2	2.0%	5	5.1%	1	1.0%	3	3.0%
	58 - 65	0	.0%	2	2.0%	1	1.0%	4	4.0%	1	1.0%
Please select your race	African	0	.0%	1	1.0%	7	7.1%	13	13.1%	4	4.0%
	Coloured	2	2.0%	4	4.0%	5	5.1%	7	7.1%	7	7.1%
	Indian	1	1.0%	5	5.1%	8	8.1%	8	8.1%	3	3.0%
	White	0	.0%	4	4.0%	6	6.1%	11	11.1%	3	3.0%
Name of main Banking Institution	ABSA	0	.0%	1	1.0%	3	3.0%	5	5.1%	7	7.1%
	Capitec	1	1.0%	1	1.0%	1	1.0%	3	3.0%	1	1.0%
	First National	0	.0%	4	4.0%	5	5.1%	12	12.1%	2	2.0%
	Investec	0	.0%	1	1.0%	0	.0%	0	.0%	0	.0%
	Nedbank	0	.0%	1	1.0%	4	4.0%	8	8.1%	4	4.0%
	Standard	2	2.0%	6	6.1%	13	13.1%	11	11.1%	3	3.0%

In terms of feeling safe using ATM's where a security guard is present the 42 to 49 year old women had the highest (7.1%) neutral responses followed by the 34-41 and 50-57 year old women who scored 5.1 % each. In terms of race the highest neutral responses were generated by Indian women (8.1%), followed by African (7.1%) and white (6.1%) women. Coloured participants' responses were 5.1 %. Standard Bank participants achieved the highest neutral responses namely 13.1% and Investec 0%. Just over twelve percent (12.1 %) of the 42 to 49 year old category of women agreed that they feel safe using ATM's where a guard is present. The lowest response (1%) was generated in the 50 to 57 year age category. African participants had a 13.1 % response rate in terms of agreeing to feeling safe when using ATM's where a guard is present while white participants achieved a 12. 1%. The lowest response (7.1%) was achieved by coloured participants. First National Bank participants had the highest (12.1%) 'agreed' responses followed by Standard Bank participants (11.1 %). Although participants find security guards helpful Katyal in his study found lighting in parking facilities the "single most important" security precaution. Also in a classic study in London the results revealed that more property offenses were committed in London in the winter

months and the increase was traced in part to the longer periods of darkness in those months. British research today shows that forty percent of night-time street crime occur when lighting levels are at five lux or below (a typical side street has a lighting level of about 18,000 lux on a bright day and two lux at night), while only three percent of such crime occurs when the lighting is above twenty lux. Sherman (1995) also provides support to the argument of security measures by mentioning that in the post-riot era of the late 1960s, security measures in quasi-public spaces gradually became viewed as a necessity. The generation that feared a “cop on every corner” in the 1960s now fears that there will not be a guard in every lobby. This expectation was enhanced by the third condition, the emerging science of environmental criminology, which narrowed the determining factors of crime from macrosocial forces to the immediate environment of each criminal event. The new science was part of a general movement toward rational choice explanations of criminal events, the premise of which is that crime is not abnormal but rational; criminals choose to commit crimes when the expected gains outweigh the expected costs. This hotly debated premise leads to even more debated conclusions about whether would-be security measures in any specific place, from uniformed guards to brighter lighting, can deter would be offenders from carrying out their crimes.

Perhaps security guards in addition to good lighting would increase levels of security.

Table 9: Respondents awareness of precautions to take at an ATM

		My banking institution does not need any more ATM safety measures									
		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %
Please select your age	18 - 25	2	2.0%	3	3.0%	5	5.1%	2	2.0%	1	1.0%
	26 - 33	3	3.0%	12	12.1%	1	1.0%	2	2.0%	0	.0%
	34 - 41	1	1.0%	15	15.2%	4	4.0%	4	4.0%	1	1.0%
	42 - 49	3	3.0%	17	17.2%	4	4.0%	0	.0%	0	.0%
	50 - 57	2	2.0%	4	4.0%	4	4.0%	0	.0%	1	1.0%
	58 - 65	1	1.0%	4	4.0%	0	.0%	3	3.0%	0	.0%
Please select your race	African	3	3.0%	12	12.1%	5	5.1%	4	4.0%	0	.0%
	Coloured	2	2.0%	14	14.1%	5	5.1%	3	3.0%	1	1.0%
	Indian	2	2.0%	17	17.2%	3	3.0%	2	2.0%	1	1.0%
	White	5	5.1%	12	12.1%	5	5.1%	2	2.0%	1	1.0%
Name of main Banking institution	ABSA	1	1.0%	13	13.1%	1	1.0%	1	1.0%	0	.0%
	Capitec	0	.0%	4	4.0%	0	.0%	3	3.0%	0	.0%
	First National	3	3.0%	11	11.1%	6	6.1%	2	2.0%	2	2.0%
	Investec	0	.0%	0	.0%	0	.0%	1	1.0%	0	.0%
	Nedbank	3	3.0%	7	7.1%	5	5.1%	1	1.0%	0	.0%
	Standard	5	5.1%	20	20.2%	6	6.1%	3	3.0%	1	1.0%

When posed with the question “My banking institution does not need any more ATM safety measures” the responses in the disagree and neutral scales were particularly interesting. In the 42

to 49 year age category 17.2 % of participants followed by the 34 to 41 category who achieved 15.2 %. The lowest response to this statement was generated from the 18-25 year category of participants. Only 4 % of the 50-57 and 58-65 age categories disagreed with the statement. In terms of neutral responses 6.1% responses were generated from both First National and Standard bank participants.

In terms of race African, Coloured and white women achieved 5.1 %. Indian women had a 3 % response rate.

Table 10: Respondents perception of using ATMs at well-lit, open, high traffic area

		I only use ATM's at a well-lit, open, high traffic area									
		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %
Please select your age	18 - 25	0	.0%	5	5.1%	4	4.0%	4	4.0%	0	.0%
	26 - 33	0	.0%	6	6.1%	2	2.0%	8	8.1%	2	2.0%
	34 - 41	0	.0%	6	6.1%	4	4.0%	14	14.1%	1	1.0%
	42 - 49	1	1.0%	2	2.0%	7	7.1%	10	10.1%	4	4.0%
	50 - 57	0	.0%	1	1.0%	3	3.0%	4	4.0%	3	3.0%
	58 - 65	0	.0%	1	1.0%	0	.0%	4	4.0%	3	3.0%
Please select your race	African	0	.0%	11	11.1%	6	6.1%	6	6.1%	1	1.0%
	Coloured	1	1.0%	5	5.1%	4	4.0%	12	12.1%	3	3.0%
	Indian	0	.0%	5	5.1%	5	5.1%	12	12.1%	3	3.0%
	White	0	.0%	0	.0%	5	5.1%	14	14.1%	6	6.1%
Name of main Banking institution	ABSA	0	.0%	2	2.0%	3	3.0%	7	7.1%	4	4.0%
	Capitec	0	.0%	4	4.0%	1	1.0%	2	2.0%	0	.0%
	First National	0	.0%	4	4.0%	6	6.1%	10	10.1%	4	4.0%
	Investec	0	.0%	1	1.0%	0	.0%	0	.0%	0	.0%
	Nedbank	0	.0%	7	7.1%	3	3.0%	4	4.0%	2	2.0%
	Standard	1	1.0%	3	3.0%	7	7.1%	21	21.2%	3	3.0%

When participants were asked to respond to the statement of using ATM's at a well-lit, open, high traffic area, majority were in the neutral and agree scales. In the neutral scale the 42 to 49 year olds scored the highest (7.1 %) followed by the 18-25 and 34 to 41 who generated 4 percentage responses. In terms of race 6 % African and 5.1% Indian and white responses were generated. Coloured responses were 4%. Further responses to this statement show Standard Bank participants generating 7.1 % responses and First National, Nedbank and ABSA generating 6. 1%, and 3 % respectively. Investec generated a .0 % response. In terms of agreeing with the statement 34-41 age category generated 14.1 % followed by the 42-49 category at 10.1 %. White women generated

14.1 % responses and Indian and coloured women generated 12. 1 % each. Standard Bank participants generated the highest score of 21. 2 % followed by First National with 10.1 %.

Similarly in the robbery at automated teller machines guide No.8. Center for Problem-Oriented Policing (Scott, (2001) maintains that contributory factors included attractive locations and the environment.

Thus Scott adds that attractive locations for robbery increase success rates of robbery. Some locations are desirable by virtue of its placement and position. These spaces may be isolated, lack security and offer ease of escape, fleeing. Hence De Sager (2002) mentions that experts argue that the best way to prevent crime at ATMs is to pay attention to the three Ls namely lighting, landscape, and location. Even Katyal (2002) who researched the benefits of lighting in helping anyone viewing a situation to see it more clearly thereby deterring/avoiding some crimes found that extra lighting encourages people to be in the area in the first place because greater visibility creates a sense of security. He further argued that an increase in the number of eyes on the street constrains crime. Similarly Hoover asserted, “It is self -evident that darkness is a friend to crime,” and the “thief, the arsonist, the rapist, the Peeping Tom and all other perverse individuals often depend on darkness to cloak their misdeeds and conceal their identities.”

Table 11: Risk at ATM Women and Men

		Women are more at risk at ATMs than men									
		Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %	Count	Subtable N %
Please select your age	18 - 25	1	1.0%	1	1.0%	4	4.1%	5	5.2%	2	2.1%
	26 - 33	0	.0%	2	2.1%	4	4.1%	8	8.2%	3	3.1%
	34 - 41	2	2.1%	5	5.2%	3	3.1%	11	11.3%	5	5.2%
	42 - 49	3	3.1%	1	1.0%	8	8.2%	7	7.2%	3	3.1%
	50 - 57	1	1.0%	1	1.0%	3	3.1%	3	3.1%	3	3.1%
	58 - 65	0	.0%	1	1.0%	3	3.1%	3	3.1%	1	1.0%
Please select your race	African	1	1.0%	4	4.1%	5	5.2%	10	10.3%	5	5.2%
	Coloured	2	2.1%	1	1.0%	7	7.2%	10	10.3%	4	4.1%
	Indian	2	2.1%	2	2.1%	6	6.2%	10	10.3%	3	3.1%
	White	2	2.1%	4	4.1%	7	7.2%	7	7.2%	5	5.2%
Name of main Banking institution	ABSA	1	1.0%	2	2.1%	5	5.2%	5	5.2%	2	2.1%
	Capitec	0	.0%	0	.0%	0	.0%	6	6.2%	1	1.0%
	First National	2	2.1%	2	2.1%	6	6.2%	10	10.3%	4	4.1%
	Investec	0	.0%	1	1.0%	0	.0%	0	.0%	0	.0%
	Nedbank	1	1.0%	4	4.1%	2	2.1%	5	5.2%	5	5.2%
	Standard	3	3.1%	2	2.1%	12	12.4%	11	11.3%	5	5.2%

In response to the statement “Women are more at risk at ATMs than men” neutral and agree were most poignant. In the 42 to 49 year age category 8.2 % participants held a neutral view while the 18-25 and 26 and 33 year categories had a 4.1 % responses. Coloured and white participants scored

7.2 %. Standard Bank participants scored 12.4 %. 11.3 % of participants in the 34-41 category agreed and 10.3 % of African, White and coloured agreed.

In support of the findings of this study Williams and McShane, (2010:181) maintain that women like young individuals increase their chance of victimisation as they decide to engage in high risk activities (such as visiting high crime areas to fulfil their roles) in terms of time and space

Similarly in the South African context women's level of exposure to high risk situations in terms of space and time is indeed influenced by her lifestyle. For example the fact that she is expected to play a significant role in the home as caretaker means she should be participating in activities such as shopping, and spending more time in the home. These activities could easily predict her whereabouts leaving her more vulnerable to victimisation both inside and outside the home. One well known form of victimisation is violence which is gendered in nature, because of the manner in which gendered power inequalities are entrenched in our society. Interpersonal and domestic violence against women has received much attention but marginalised areas such as women as victims of ATM crime have been scarce. This although South African (black) women are variously disadvantaged as a result of their race, socio economic status, gender and disproportionally high levels of criminal victimisation.

Their victimisation is usually in the form of Gender based violence usually manifested physically, sexually, emotionally, financially or structurally. Most acts of interpersonal gender-based violence are committed by men against women.

Consequently, with respect to the current research banking facilities must have adequate safety measures in their ATM environments. Safety of ATM users (of customers) is a human right. It is a necessary condition for user confidence and continued user participation. When communities (banking community included) do not feel safe and live in fear, the country's economic development and the people's well-being are affected, hindering their ability to achieve their (socio-economic) potential. This is particularly so in the case of women, who are more vulnerable and less likely to achieve their potential in unsafe environments (National Development Plan 2030, 2015). In Krugersdorp, province of Gauteng, a woman who was targeted by two male ATM criminals stole her entire salary. After the first male used the ATM the victim attempted to use the

ATM. The device indicated it was not working. She left but was followed by the first male who told her the ATM was working again. On using the ATM it appeared as though the card was swallowed. The male engaged her further prompting her to enter her card pin. While doing this the male disappeared and a second male appeared in the queue behind the victim. By then her pin was compromised and within three minutes her entire salary was withdrawn from her account (Coetzer, 2015).

5.4. Inferential Data Banking Institutions

Kruskal Wallis WAS RUN ON ALL key DEMO VARIABLES race. But only signature findings are reported below.

Table 12: Respondents feeling safe using ATMs with a guard variable Banks

Ranks			
	Name of main Banking institution	N	Mean Rank
I prefer using ATM's where only a security guard is present	ABSA	16	65.88
	Capitec	7	46.14
	First National	23	49.24
	Investec	1	10.50
	Nedbank	17	58.85
	Standard	35	40.84
	Total	99	

Table 12.1: Kruskal Wallis test Respondents feeling safe using ATMs with a guard variable Banks

Test Statistics ^{a,b}	
	I prefer using ATM's where only a security guard is present
Chi-Square	13.247
Df	5
Asymp. Sig.	.021

a. Kruskal Wallis Test

b. Grouping Variable: Name of main Banking institution

A Kruskal-Wallis H test showed that there was a statistically significant difference in feelings of safety using an ATM where a security guard was present, $\chi^2(5) = 13.247$ $p = 0.021$, with ABSA banking having the highest mean rank score of 65.88.

Table 13: Respondent's not afraid to use ATMS variable Banks

Ranks			
	Name of main Banking institution	N	Mean Rank
I only use ATM's at a well-lit, open, high traffic area	ABSA	16	59.06
	Capitec	7	29.93
	First National	24	52.50
	Investec	1	12.00
	Nedbank	16	39.09
	Standard	35	54.23
	Total	99	

Table 13.1: Kruskal Wallis Test on Banks were respondents not afraid to use ATMS

Test Statistics ^{a,b}	
	I only use ATM's at a well-lit, open, high traffic area
Chi-Square	11.217
Df	5
Asymp. Sig.	.047

a. Kruskal Wallis Test

b. Grouping Variable: Name of
main Banking institution

A Kruskal-Wallis H test showed that there was a statistically significant difference in feelings of safety when using an ATM in a well-lit, open and high traffic area $\chi^2(5) = 11.217$ $p = 0.047$, with ABSA banking having the highest mean rank score of 59.06

5.5. Inferential Data Race

Table 14: Respondents not afraid to use ATMS variable Race

Ranks			
	Please select your race	N	Mean Rank
I only use ATM's at a well-lit, open, high traffic area	African	24	33.62
	Coloured	25	49.76
	Indian	25	51.02
	White	25	64.94
	Total	99	

Table 14.1: Kruskal Wallis Test Respondent's not afraid to use ATMS variable Race

Test Statistics ^{a,b}	
	I only use ATM's at a well-lit, open, high traffic area
Chi-Square	16.360
Df	3
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable: Please
select your race

A Kruskal-Wallis H test showed that there was a statistically significant difference in feelings of safety when using an ATM in a well-lit, open and high traffic area amongst respondents of different banking institutions $\chi^2(3) = 16.360$ $p = 0.001$, with White respondents having the highest mean rank score of 64.94

5.6. Inferential Data Age

Table 15: Awareness of precautionary measures at the ATM variable age

Ranks			
Please select your age		N	Mean Rank
I am aware of precautions to take at an ATM	18 – 25	13	48.42
	26 – 33	18	41.61
	34 – 41	26	49.87
	42 – 49	24	47.29
	50 – 57	11	58.36
	58 – 65	8	74.75
	Total	100	

Table 15.1: Kruskal Wallis Test Awareness of precautionary measures at the ATM variable age

Test Statistics ^{a,b}	
	I am aware of precautions to take at an ATM
Chi-Square	11.305
Df	5
Asymp. Sig.	.046

a. Kruskal Wallis Test

b. Grouping Variable: Please select your age

A Kruskal-Wallis H test showed that there was a statistically significant difference in awareness of taking precautions when using an ATM between respondents of different ages $\chi^2(5) = 11.305$ $p = 0.046$, with respondents between the ages of 58-65 having the highest mean rank.

The above findings resonate the aims and objectives of the current study. The chapter that follows namely chapter 6 presents the conclusions and recommendations relevant to this study.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction

As outlined in chapter one this final chapter of the thesis synthesises the findings, and discusses how the data sheds light on a number of critical safety issues concerning women ATM users in the eThekweni municipality. It also discusses how the findings relate to the existing literature on women's safety and vulnerability broadly and as ATM users specifically. The data analysed in chapter four and used to synthesise the findings points to areas of concern and recommendations for future research on the topic.

Women are robbed at ATMs by means of intimidation, violence and or the threat of violence. (Warby, 2000) Media results in United States (Goldeen, 2015), (McLaughlin, 2013), (Turlock, 2016) Europe (ITV, 2016), Canada (Mayoff, 2016) and India (NDTV, 2015), (PTI, 2013) show women victims being attacked with dangerous weapons including machetes, knives, firearms at the ATM premises and surrounds.

Sustainable Development Goals 2030 prioritise women victims in the criminal justice system. Although this has been the case women as victims of crime have gained greater research visibility in some focus areas compared to others. One well known form of victimisation is violence which is gendered in nature, because of the manner in which gendered power inequalities are entrenched in our society. Interpersonal and domestic violence against women has received much attention but marginalised areas such as women as victims of ATM crime has been scarce. Against this backdrop this study sought to answer the following research questions:

a) How Safe do women feel when using ATM banking facilities?

Findings revealed there was a significant difference in feelings of safety by women using an ATM with the highest respondents only feeling safe with a guard present highest mean from ABSA, followed by Nedbank and First National Bank. Findings show that women feel safe using ATMs located in a well-lit, open high traffic area highest ABSA, followed by first National Bank and Standard Bank answering the question, in the absence of a guard or location not being in a well-lit, open high traffic area, women feel unsafe using ATM banking facilities.

b) What is the difference in Women's perception of ATM safety between four race groups?

Findings revealed whereas all participants irrespective of race are aware of precautions to take at an ATM. White women were more fearful than other race groups when using an ATM. African and white participants felt safe using an ATM with a guard present. White women were the highest followed by Indian and coloured women to use ATMS in a well-lit, open high traffic area.

c) What is the difference in Women's perception of ATM safety between banking institutions?

Findings show ABSA Bank respondents are afraid to use ATMs and requires adequate security measures to be in place. One of the measures increasing usage in terms of a guard at the ATM. Further the ATM to be in a well-lit, open, high traffic area.

Consequently, banking institutions must have adequate security measures at their ATM environments to increase user confidence and participation among women.

Findings show that that the largest percentage of participants hailed from eThekweni municipality hence the researcher recommends that a future study should have a representative spread of participants across KwaZulu Natal.

Findings of the study reveal that women across all race groups are equally vulnerable to ATM crime or feelings of insecurity when using ATM's. However the study did not cross tabulate race with age. So a recommendation for a future study is to cross tabulate the race of women with age to have a fuller understanding of the most vulnerable age groups in the various race categories.

6.2. Recommendations

The following recommendations for further research can be made based on the findings from this research study: (a) This survey was limited to women in the eThekweni municipality. Perhaps increasing the sample to include individuals from across KwaZulu Natal could provide for a greater collection of information across the entire spectrum of women banking clients. In addition using a random sampling technique including all banking institutions may have yielded different results. Further broadening the scope of the study might include additional aspects of women's fears and safety even as far as general banking services and not limited to their feelings of safety and vulnerability when using only ATM's. This may provide different results within the unstudied

areas. (c) Despite the participants being sampled through snowball sampling with the assumption that they had similar experiences there is little in the study findings that show differences in terms of banking habits, Perhaps a study that uses a sampling frame as suggested earlier like a random sampling frame drawing from a population with similar characteristics. A parallel study should be conducted to research the perceptions of male clients' feelings of safety and vulnerability. This would allow a researcher to ascertain whether there are difference in security experiences between men and women. This information would allow banks to have data regarding where banking facilities should provide different facilities for the sexes that feel more vulnerable.

While the Survey instrument provided a fair amount of information on women's feelings of vulnerability adding in components of a mixed-method study would allow future researchers to collect qualitative information regarding the reported perceptions. Focus groups and interviews could be used to gather the qualitative data required to provide a holistic view on women's feelings of vulnerability during ATM banking. Future research could also inquire from participants what they consider suitable remedies for women victims of ATM crime. Focus should be paid to indirect costs of ATM crime including pain, suffering, psychological impact and the trauma experienced by the victim.

This study further recommends understanding in depth the minimum-security standards required in the protection of the ATM device on the front end for the user. It also recommends examining how the minimum-security standards that exist in the protection of the back end, in terms of the protection of the cash, by virtue of requirements by the Reserve bank makes the banking institution safer and whether an absence of security measures on the front end, creates environments dangerous for women and facilitate crime.

The data may provide banking institution administrators with the means to provide safety according to the needs of women clients. It would be of great interest to further disaggregate the collected data to compare the feelings of (safety) women who have been banking for 10 or more years compared to those who have been in using ATM facilities for 9 or fewer years. This particular research study did not disaggregate data, nor did it seek to find a balance between the safety levels of the participants. If sought this information could provide banking institution decision makers with insight regarding the effectiveness of current safety measures for women at ATM's.

In terms of research, although the study sheds light on the violent nature of ATM crime presently additional research is required to unpack the global trend and the potential of multiple offences against women emanating from ATM crime. It would perhaps require a research to cover a wider geographical area and not limited to KZN. It should also cover the current legislation and collation of ATM statistics. The total impact of ATM crime is not understood due to the lack of well recorded statistics. A further attribute is the banks reimbursement process for victims of ATM crime. The process of placing an individual back to the financial position they were in prior to the offence. It negates looking at the psychological impact of ATM crime, the criminal act itself, on the user. This may leave a perception that the crime is not as severe and society is socialised to the offence. That this is just a financial institutions responsibility leaving citizens vulnerable to third party crime.

Further research can unpack if there is a public - private relationship required to minimise ATM crime as a catalyst for subsequent offences.

Furthermore the researcher recommends further exploration of minimum security standards at the ATM. What this entails and if security measures are merely addressing a person's perception or effective in preventing the opportunity for crime. To assess the protection afforded to the device in terms of losing cash versus the protection afforded to the user of the ATM. The Reserve bank ensures that banks have a minimum security standard for protecting the cash in the ATM namely alarm and dye-staining. Should there not be minimum security standard on the front end protecting the user.

6.3. Limitations of the Current Study

Despite the new baseline data generated in the study there are a few limitations observed. The lack of a mixed method methodology was the greatest limitation to this study. Further a random sampling procedure would have made the findings generalizable. The sample size also prevents the generalisability of the findings.

6.4. Conclusion

Women are predisposed to ATM crime and further crimes as a result of the criminal opportunity due to lack of, limited or inadequate security measures at the ATM. ATM crime is a catalyst to more serious violent crimes especially to women in terms of rape, sexual assault, kidnapping and the threat to life. As women no longer stay at home and enter the workplace the opportunity due to lack of guardianship, together with the potential offender's perception of target suitability, effects a women's risk of victimisation.

The severity of ATM crime is not clear as a result of the crime statistics recorded by the police. It does not allow for defined recoding of incidents as the crime reported is recorded as theft, robbery, assault, fraud or other offences. Sabric statistics recorded, by virtue of internal information shared by four banks, is the only source.

The findings from this study could prove beneficial in developing talking points among banking institution decision makers that may allow for ATM security reform that underscores how to improve safety for women ATM users.

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Appendix A: Survey Questions

An Exploratory study of Women's Perceptions of Safety as Automated Teller Machine (ATM) users (A select sample in eThekweni Municipality, KwaZulu Natal (KZN))

Objective :

- 1.To investigate how safe women feel using ATM's
2. To investigate whether women are able to access their monies safely.

Please select your age *

- ☐ () 18 - 25
- ☐ () 26 - 33
- ☐ () 34 - 41
- ☐ () 42 - 49
- ☐ () 50 - 57
- ☐ () 58 - 65

Please select your race *

- ☐ () African
- ☐ () Coloured
- ☐ () Indian
- ☐ () White

Please select your area: *

- ☐ () eThekweni - Durban
- ☐ () North Coast
- ☐ () Other:

Name of main Banking institution:

- ☐ () Absa
- ☐ () Capitec
- ☐ () First National Bank
- ☐ () Nedbank
- ☐ () Standard Bank
- ☐ () Other:

I feel safe transacting at an ATM in a mall/shopping centre

- ☐ () Agree
- ☐ () Strongly agree

- () Neutral
- () Disagree
- () Strongly disagree

I feel safe transacting at an ATM not attached to a bank branch

- () Agree
- () Strongly agree
- () Neutral
- () Disagree
- () Strongly disagree

I am never afraid to use any ATM

- () Agree
- () Strongly agree
- () Neutral
- () Disagree
- () Strongly disagree

I am aware of precautions to take at an ATM

- () Agree
- () Strongly agree
- () Neutral
- () Disagree
- () Strongly disagree

I prefer using ATM's because of convenience

- () Agree
- () Strongly agree
- () Neutral
- () Disagree
- () Strongly disagree

I prefer using ATM's where only a security guard is present

- () Agree
- () Strongly agree
- () Neutral
- () Disagree
- () Strongly disagree

I prefer using ATM's when only Security cameras are available

- () Agree
- () Strongly agree
- () Neutral

- ☐ () Disagree
 - ☐ () Strongly disagree
- I only use ATM's during peak periods**

- ☐ () Agree
 - ☐ () Strongly agree
 - ☐ () Neutral
 - ☐ () Disagree
 - ☐ () Strongly disagree
- I only use ATM's after hours**

- ☐ () Agree
 - ☐ () Strongly agree
 - ☐ () Neutral
 - ☐ () Disagree
 - ☐ () Strongly disagree
- I use ATM's anytime of the day/night because I feel very safe**

- ☐ () Agree
 - ☐ () Strongly agree
 - ☐ () Neutral
 - ☐ () Disagree
 - ☐ () Strongly disagree
- I am safe when I am assisted by branch personnel**

- ☐ () Agree
 - ☐ () Strongly agree
 - ☐ () Neutral
 - ☐ () Disagree
 - ☐ () Strongly disagree
- I am comfortable with strangers assisting me at an ATM**

- ☐ () Agree
 - ☐ () Strongly agree
 - ☐ () Neutral
 - ☐ () Disagree
 - ☐ () Strongly disagree
- I am aware of steps to take in the event of being an ATM crime victim**

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree

- ☐ () Strongly disagree

I am aware of being defrauded at ATM's

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

My bank provides very safe ATM environment

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

It is always safe for me to use my main banking institution's ATM's

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

My banking institution does not need any more ATM safety measures

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

I only use ATM's at a well-lit, open, high traffic-area

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

I avoid bank ATM machines adjacent to obvious hiding places

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

I am aware of the toll-free number to register a stolen card that is displayed on the ATM

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

I always retain transaction slips and check them against my statements

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

I am extra cautious when using an ATM

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

I will never use an ATM if am not accompanied by my spouse/child/partner

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

Women are more at risk at ATMs than men

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

More woman are attacked at ATMs than men

- ☐ () Agree
- ☐ () Strongly agree
- ☐ () Neutral
- ☐ () Disagree
- ☐ () Strongly disagree

Appendix B: Gate Keepers



From: Pillay, Roy R
Sent: 21 November 2016 06:18 PM
To: Roopnarain, Jessica J <Jessica.Roopnarain@standardbank.co.za>
Subject: RE: Letter of Authority to conduct the study

Hello Jessica,

We support your research topic: Women targets of ATM crime in Durban CBD specifically where the customer sustained a loss and has been reimbursed. To contact the identified customer and enquire if willing to participate in a research to understand the social and economic effect. The research will be a questionnaire attached ensuring anonymity. I am looking for 10 female customers willing to participate residing in KZN.

To this end, we will gather the information from our records and pass them on to you within the next week.

This permission is given on the understanding that the study will be anonymous, without the Bank's name being published or its reputation being damaged in any shape or form.

With kind regards,
Roy Pillay
FCRM: Card and Emerging Payments
Group Financial Crime Control
Integrated Operational Risk
Standard Bank of South Africa Ltd
Johannesburg

Tel: +27(0)11 636 4165
Cell: +27(0)83 630 7466

Appendix C: Ethical Clearance



29 November 2016

Mrs Jessica Roopnarain 991238960
School of Applied Human Sciences
Howard College Campus

Dear Mrs Roopnarain

Protocol Reference Number: HSS/1861/016M

Project title: Investigation on the Socio-economic effects of Automated Teller Maching (ATM) crimes on women victims in Durban Central Business District (CBD)

Full Approval – Expedited Application

In response to your application received 25 October 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application 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.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

cc Supervisor: Dr ND Gopal
cc. Academic Leader Research: Dr Jean Steyn
cc. School Administrator: Ms Ayanda Ntuli

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