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The Levels, Types and Determinants of Post-assault Behaviours among Sexually Assaulted Women in South Africa, 2011-2012

A RESEARCH REPORT SUBMITTED TO THE SCHOOL OF SOCIALSCIENCE, UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG,IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN THE FIELD OF DEMOGRAPHY AND POPULATION STUDIES FOR THE YEAR 2014

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Declaration

I, Genevieve Nahbeelah Dean, hereby declare that this research report is my own original work. It is being submitted to the Faculty of Humanities and Social Sciences, University of the Witwatersrand, Johannesburg. It is submitted in partial fulfilment of the requirement for the degree of Master of Arts in the field of Demography and Population Studies. I declare that to the best of my knowledge it has not been submitted before in part or in full for any degree or examination at this or any other university.

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15 August 2014

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Abstract

Background: South Africa faces an unprecedented problem of rape and violence against women and girls – amongst the highest in the world. While the health and social consequences of sexual assault are detrimental, it is not clear how victims of sexual assault respond to these acts. This study therefore examines the levels of reported sexual assault in South Africa in order to establish the extent of the problem.

Methods: This study is a secondary data analysis of the 2011 and 2012 Victims of Crime Survey (VOCS) that was conducted by Statistics South Africa. The outcome variable of this study is post-assault behaviour namely, reporting to the police, other reporting to traditional leaders and Chiefs' as well as seeking medical attention. This variable is then re-categorised into: no-behaviour, one or more behaviours. Descriptive statistics of the study population, the Goodman Lambda test of predictability that provided a predictive association in terms of percentages between the outcome variable and the selected predictor variables, and multivariate analysis using the Multinomial Logistic Regression producing odds ratios to examine whether an association was present or not were used.

Results: According to the current study, the rate of sexual assault for 2011 was 11 women per 1000 women aged 15 years and older compared to 5 women per 1000 women aged 15 years and older in 2012. Associations were found between location of a sexual assault and relationship to perpetrator with whether or not a victim engaged in any post-assault behaviour. Interestingly, race, age, income and province were not found to be significantly associated with whether a victim engaged in any post-assault behaviour. The study found that there is an association between the location of an assault as well as the province the victim originates from and the likelihood that a victim will choose to engage in post-assault services at their disposal.

Both province and location of an assault were found to be significantly associated with post-assault behaviours at a multivariate level.

Conclusion: The current study has found that the majority of victims (64.96%) did not engage in any post-assault behaviour. Other research has examined why this may be the case and found that the fear of being re-victimized by healthcare workers and the criminal justice system, as well as discriminated against by their communities may be important factors associated with reporting a sexual assault. It is therefore recommended that policy makers re-evaluate how to best promote the reporting of a sexual assault through educating women about the health benefits associated with the services, such as treatment for sexually transmitted illnesses including HIV/AIDS as well as provide medical services to treat victims' possible post-traumatic disorders, stress and anxiety. Educating and training both police officials as well as healthcare workers on how to treat victims of sexual assault may indeed go a long way in promoting victims to report and seek assistance after an incident.

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CHAPTER 1: INTRODUCTION

1.1. Sexual Assault in South Africa

Sexual assault in South Africa is of particular concern due to both a sharp rise over the past two decades as well as the issue of inaccurate data (Jewkes et al., 2002; WHO, 2013). Jewkes et al. (2009) reported that South Africa faced an unprecedented problem of rape and violence against women and girls. According to the Victims of Crime Survey (VOCS) of 1998, an estimated 55 000 South African women were raped in 1997; that is, 134 women per 100 000 people (Orkin et al, 2000). Furthermore, the South African statistics on the incidence of rape that was reported to the police in 1997 was 120 cases per 100 000 of the population (Orkin et al., 2000). However, in an independent study by Jewkes et al. (2002), the rate of rape and attempted rape of girls 0-17 years of age was 47 per 100 000 girls aged 0-17. It is further estimated in another independent study that by 2003/04 the rape rate had increased to 114 per 100 000 women in South Africa (Kapp, 2006). According to the South African Police Service, all sexual assault offences (including rape), rose in 2008/09 to 145 per 100 000 women (SAPS, 2013). However in 2011/2012, the South African Police Service estimated a slight decrease to 128 rapes per 100 000 women (SAPS, 2013). The above estimates from various sources, demonstrates two pressing concerns: high estimates of rape and sexual violence as well as the issue of inaccurate sources of data in many countries using South Africa as an example.

When South Africa is compared to the rest of Africa using international comparison methods, such as International Criminal Police Organization (Interpol), it ranks as having the highest reported rates of sexual assault (Orkin et al., 2000). For example, when comparing the number of reported cases in neighbouring African countries, South Africa remains the highest: Botswana 68 per 100 000 in the population, followed by Swaziland with 59 per 100 000 population for the year 1996 (Orkin et al., 2000). Similarly, national studies demonstrate that

South Africa has one of the highest prevalence of sexual assault in the world. In 2011, a cross-sectional household survey was conducted in South Africa, exploring the patterns and prevalence of rape and sexual assault perpetration among 1737 men aged 18-49 (Jewkes et al., 2011). The study found that approximately 52 % of men had sexually assaulted women on multiple occasions. Additionally, nearly 28% of the sample reported having raped a woman, of which 4.7% reported having sexually offended in the last year (Jewkes et al., 2011).

1.2. Problem Statement

The VOCS of 1998 estimated the rate of sexual assault and rape to be 134 per 100 000 of the population, of that it was reported that only 68 per 100 000 women actually reported the assault (Orkin et al, 2000). However, little else is known about these women. In South Africa sexual assault rates have been increasing over the last two decades. This is important to note as sexual assault has an impact on the physical and mental health of the victim (Jewkes et al., 2001). Additionally, the physical injury that usually accompanies a sexual assault is often associated with a range of sexual and reproductive health problems (Jewkes et al., 2001). This includes the risk of HIV/AIDS, unwanted pregnancy, substance abuse and suicide (Jewkes et al., 2009). In addition to the physical consequences of sexual assault are the mental health consequences. A study conducted by Mathews et al. (2012) examined the mental consequences of sexual assault on both women and children in South Africa. The study found that due to the relationship of the victim to the perpetrator- most victims are familiar with their perpetrators, there are long term mental health consequences such as post-traumatic stress, distress as well as anxiety (Mathews et al., 2012).

Furthermore, there are additional challenges that are present in the study of sexual assault: the issue of under-reporting (UKDoH, 2005; Dewkes et al 2003). In a study by Jewkes and Abrahams in 2002, it was demonstrated that although the number of cases that have been reported is high, a large number of sexual assault cases are not reported to the police or anyone else. Of the women who are at risk of sexual assault, little is known about those who do report the assault in terms of their socioeconomic and demographic characteristics.

Further studies that have been conducted focus exclusively on the levels of sexual assault in South Africa. Although this is important, in addition to the meaning of rates of sexual assault it is important to understand what behaviours victims engage in after the assault in terms of reporting, seeking medical assistance or counselling as well as what predisposes them to engage in such behaviours.

Additional barriers to both the reporting of sexual assault as well as the help-seeking behaviour of victims after the assault have been documented in South Africa. A study found that among the barriers of reporting a sexual assault are the fear of not being believed by police, problems of physical access to the police (distance to police service as well as transportation), fear of retaliation by the perpetrator as well as fear of experiencing rudeness and poor treatment by the police and healthcare workers (Naidoo, 2013). The low conviction rates of sexual assault perpetrators is noted to serve as a deterrent to reporting the assault as victims fear that nothing will be done and fear the shame and guilt if there is no conviction (Jewkes & Abrahams, 2002). Non- reporting serves as one of the major barriers to understanding sexual assault as well as post-assault behaviours among victims. An additional challenge is identifying how many of the victims who do not report the assault engage in other post-assault behaviours such as seek medical attention or go for counselling.

Similar results were demonstrated by the National Management Guidelines for Sexual Assault in South Africa, which examined findings from community-based surveys, and found that there are a range of factors that victims have identified as being deterrents to reporting the crime and seeking assistance. Among these are the fear of not being believed, fear of the legal system (justice not being served by a conviction), fear of stigmatization, fear of losing financial support-as the perpetrator may be the bread-winner and so on (Dewkes et al., 2003). Furthermore, it is reported that women find it difficult to report an assault due to stereotypes, discrimination, age, mental illness among others (Rumney et al., 2010). These factors have been identified as being important, however very little has been done to determine what the characteristics of victims are who report or engage in other post- assault behaviours such as counselling and seeking medical attention.

Additional factors associated with non-reporting have to do with the social context in which many sexually assaulted victims find themselves in. For example, "inequality and patriarchal constructs of masculinity has been found to reinforce male dominance over both women and children" (Mathews et al., 2012; 84). This implies that most victims of sexual assault may believe that they deserve what has happened to them as it is deeply engrained in many cultural and traditional societies. Furthermore, the unequal power relations in relationships (including marriage) have also been identified as impacting on non-reporting of sexual assault (Mathews et al., 2012). It is therefore important to understand the post-assault behaviours of victims of sexual assault as this may have far reaching consequences not only for policy and programmes aimed at victims but also on programmes aimed at creating awareness of the consequences of sexual assault not only to the victim but to the public as a whole.

The purpose of the current study is to address these issues, through firstly determining the level of individuals who report sexual assault in South Africa. Secondly, the study aims to identify

what the different post-assault behaviours are among sexually assaulted women in South Africa. And lastly, the study aims to identify the socioeconomic and demographic characteristics of the individuals who report and access post-assault care in South Africa.

1.3. Research Question

What are the levels, types and determinants of post-assault behaviours among sexually assaulted women in South Africa, 2011-2012?

1.4. Research Objectives

1.4.1 Main objective

To determine the levels, types and determinants of post-assault behaviours among sexually assaulted women in South Africa

1.4.2 Specific objectives

1. To estimate the level of sexual assault in South Africa according to the Victims of Crime Survey 2011-2012
2. To quantify the types of post-assault behaviours among victims of sexual assault in South Africa
3. To determine the association between selected socioeconomic and demographic characteristics of victims and post-assault behaviours (PAB)

1.5. Justification

The levels of sexual assault are important, so are the post-assault behaviours among victims. It is important to understand the level of sexual assaults reported as well as the extent to which victims of sexual assault report the assault, seek medical attention and other post-assault measures. Previous research has focused primarily on the levels and determinants of sexual assault, neglecting an important aspect: the post-assault measures that are taken by the victims. In light of the severity of sexual assault in South Africa, it is important to understand the policy and programmatic impact of the current study.

The South African government faces the continual challenge of non-reporting of sexual assault which impact on how resources are allocated to related-health services (Lievore, 2003; Naidoo, 2013). It has been noted that although South Africa has achieved substantial growth in terms of redressing the inequality in terms of healthcare services as a result of the legacy of Apartheid, the medico-legal services has been neglected (Naidoo, 2013). Understanding the post-assault behaviours that victim's access are an important aspect when designing healthcare services aimed specifically at victims of sexual assault. Currently, there is a comprehensive medical management package available for victims of sexual assault in South Africa. The medical package includes the treatment of injuries and a clinical evaluation, a pregnancy test and emergency contraception, prophylaxis of sexually transmitted infections, HIV diagnostic testing and counselling and Post Exposure prophylaxis, a forensic examination as well as trauma counselling (Population Council, 2008; Dewkes et al., 2003). Furthermore, quantifying post-assault behaviours of sexually assaulted victim's impacts on the capacity building of healthcare professionals and police in terms of how they treat victims of sexual assault. This is in terms of training and sensitizing both police and healthcare professionals (doctors and nurses).

The components of the medical management package for victims rely on trained professionals who are able to treat the victims with sensitivity and care. For example, in the treatment of injuries and clinical valuation it is advised that clinicians should provide initial comfort counselling and provide the victims with a full explanation of the procedure to minimise additional trauma (Population Council, 2008). This is very difficult to achieve in the South African context due to the lack of trained professionals.

Of particular concern is the proximity of the various components of the medical management package provided to the victims (Population Council, 2008). Additionally, the lack of referral mechanisms between the components of the management package such as the family planning clinics and the HIV clinics often confuses and delays the victim from obtaining all the necessary treatments after an assault (Population Council, 2008).

Naidoo (2013) conducted an exploratory study of sexual assault in Durban, South Africa in relation to the potential barriers of reporting sexual assault. The study found that the lack of healthcare facilities and trained professionals in dealing with victims of sexual assault is a severe hindrance to the reporting and accessing of post-assault services (Naidoo, 2013). These services include medical treatment of victims as well as the reporting of the incident to the police. It is important to understand the exact extent of sexual assault in South Africa to amend and design healthcare and legal policies that deal specifically with victims of sexual assault. A vital aspect to this process is through the post-assault behaviours of victims such as reporting an incident and seeking medical attention. This process allows researchers and policy-makers the opportunity to quantify not only the issue of sexual assault rates, but also it to quantify the post-assault behaviours of sexually assaulted victims in South Africa. This in turn affects resource allocation as well as the training of both healthcare professionals and criminal justice

system officials such as the police to be more sympathetic and sensitive when handling sexually assaulted victims.

Furthermore, the case of non- reporting of sexual assaults has implications for two important aspects: the rates and levels of sexual assault remain obscured, but more importantly, the long term goal of assisting victims to recover is not met (Naidoo, 2013). It is important to understand the extent to which victims of sexual assault access different kinds of post-assault services in order to better evaluate the effectiveness of these services. The evaluation of the utilization of services will allow governments and healthcare providers to better understand what strategies to retain, strengthen or eliminate. Furthermore it allows governments to better equip medical professionals, law enforcement, communities, family and friends and anyone else who may be involved in the process of preventing or treating the incident once it has occurred (WHO, 2013).

The current study will contribute to the larger body of knowledge on sexual assault through providing insight into an area that has been fairly neglected. Additionally, the current study will assist policy makers in this regard through quantifying post-assault behaviours and creating a more detailed description of the characteristics (demographic and socioeconomic) of victims who may choose to engage in a specific post-assault behaviour. This will in turn allow health and legal policies to be designed accordingly.

1.6. Definition of Terms

There are several forms of sexual assault including domestic sexual abuse, child sexual abuse, human trafficking as well as rape (WHO, 2013). For the purposes of the current study, sexual assault in the form of rape will be considered.

Definitions of sexual assault, specifically rape, have aroused interest and debate among scholars of different schools of thought over the years. As a result there has been a lack of consensus regarding a definitive definition of sexual assault (Basile et al, 2002).

However for the purposes of the current study, the term *sexual assault* will be defined as:

> '*any act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work'*
>
> (WHO,2013, pp. 149).

Other important terms that will be used in the study:

Perpetrator: person(s) who commits the crime

Post-assault behaviours: These are the behaviours that a victim would pursue after the occurrence of the assault. For the purposes of the current study these behaviours include the reporting of the crime to the police, reporting the crime to other authority figures such as a traditional leader and seeking medical assistance, such as going to the clinic/hospital. Medical assistance is used in each of the individual crimes such as robbery to ascertain if a victim, regardless of the crime, actually sought medical attention; it is for this reason that it is included in the current study as one of the three possible post assault behaviours. Important to note is that the victim is asked whether they had experienced any injury during the sexual assault and whether they then sought medical attention

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1. Literature Review

2.1.1 Global sexual assault

The incidence and prevalence of sexual assault cases have been documented all over the world. According to the United Nation's Secretary-General's Campaign, 'UNiTE to end violence against women', one in five women worldwide will become victims of rape or attempted rape in their life time (UNDPI, 2011). Furthermore, it is estimated that almost 70% of women worldwide experience some form of violence, including rape (UNDPI, 2011).

In an exploratory study conducted in the United States of America (USA), Canada and England it was found that Canada had the highest rates of less serious sexual assaults (such as sexual harassments); the USA was reported to have the highest rate of serious sexual assaults (including rape); England was reported to have the lowest rates of sexual assault compared to Canada and the USA (Carson, 2014). It is estimated that in some countries, such as Java, London as well as Nicaragua, one in four women experience sexual violence by an intimate partner (WHO, 2013). According to the World Health Organization's (WHO), multi-country study, the life-time prevalence of sexual assault by intimate partners to women aged 15-49 ranged between 6% in Japan to 59% in Ethiopia (WHO, 2012). In addition, it was found that 59% of women in Ethiopia and 17% of women in Namibia had reported the experience of sexual violence by an intimate partner (WHO, 2012). Furthermore, a comparative analysis of surveys from Latin America and the Caribbean found sexual assaults by intimate partners range between 5% and 15% (Bott et al, 2013). Additionally, nearly one-third of adolescent girls report their first sexual encounter before the age of 16 (WHO, 2013). Research suggests that all forms of sexual assault are coercive in nature (Clark & Quadara, 2010).

In some instances sexual assault cases may be under-reported or non-existent due to the nature of sexual assault- coercive and aggressive. Important to note is the circumstance in which sexual assault occurs. As can be observed in many instances of sexual assault, the assault occurs in contexts of familiarity and trust (Lievore, 2003). Due to the contexts in which the assault occurs, victims report feelings of fear and disbelief if they were to report the assault to anyone. As a result data on levels of sexual assault may be severely under-reported (Lievore, 2003).

The increase in sexual assault cases, specifically rape, is of concern to all governments' of the world due to the consequences it has on both the victim as well as society at large (UNDPI, 2011). Among the consequences, HIV/AIDS, unwanted pregnancies, depression and stigmatization are of key concern to both policy makers' as well as governments. The reason for this is due to the fact that these consequences have an effect on healthcare policies with regards to women's' reproductive health outcomes. It is estimated that in Sub-Saharan Africa females aged 15-24 account for 76% of the total HIV/AIDS rates (amfAR, 2005). One key factor that has been attributed to the increase in prevalence rates of HIV/AIDS among women is gender-based violence (amfAR, 2005). Important to note is that gender-based violence includes, physical, sexual and psychological abuse by an intimate partner (amfAR, 2005). In a study conducted in the USA, McFarlane et al (2004) found a significant correlation between HIV/AIDS, unwanted pregnancies and sexual assault. The study found that 15% of women attributed contracting a sexually transmitted illness (STI's) and HIV/AIDS from a sexual assault (McFarlane et al, 2004). Furthermore, 20% of women had experienced an unwanted pregnancy as a result of sexual assault (McFarlane et al, 2004).

The estimates of sexual assault, as given above, must be interpreted with caution when comparisons and inferences are made with developing countries of the world. The reason for

this is due to many developing countries poor or lack of necessary infrastructure for accurate crime reporting as well as available survey data to counter act the effect of the lack in infrastructure (Jewkes & Abrahams, 2002). South Africa is a peculiar example as the country does not fall on either extremity of being a fully-developed country nor a completely under-developed country. It is with this in mind that the current study aims to explore the levels of sexual assault in South Africa as well as whether or not victims have knowledge on the possible post-assault facilities available to them and whether they utilise the services provided to them at these facilities.

2.1.2 Sexual assault in South Africa

Sexual abuse of girls is a problem worldwide (UNDPI, 2011). In sub-Saharan Africa it is a growing concern, particularly in South Africa (Jewkes et al., 2002). The subject of sexual assault is a sensitive issue due to the nature of the rape as well as the circumstances in which it occurs (Lievore, 2003). The concern of sexual assault rose dramatically between 2001 and 2002 in South Africa (Posel, 2005). Up until the mid-1990's in South Africa, sexual offences were marginalised and kept secret (Posel, 2005). The secrecy of sexual assault has made it difficult to ascertain the exact extent of sexual assault in South Africa. It must therefore be noted that sexual assault research conducted during the early post-apartheid period in South Africa were severely limited due to the lack of reporting as a result of the secretive nature it had during the apartheid period (Posel, 2005). Importantly, the issue of under-reporting remains a concern in post-apartheid South Africa (Naidoo, 2013).

There have been a number of studies conducted on various aspects of sexual assault including the victim-perpetrator relationship, and age at which first sexual assault occurred among others in developed countries. However, research in developing countries has been limited due to poor infrastructure with regards to reporting crimes (Jewkes & Abrahams, 2002). For example, in a

study conducted by Jewkes et al (2002), which examined rape among 5-14 year olds, it was reported that 85% of rapes occurred to young girls aged 10-14. The remaining 15% occurred to girls between 5-9 years of age. This study also demonstrated that school teachers were responsible for 33% of rapes in South Africa, with relatives and strangers accounting for 21% respectively and boyfriends accounting for 10% (Jewkes et al, 2002). Furthermore, Jewkes and Abrahams (2002) demonstrate that by 1999 there were 240 per 100 000 women who reported cases of rape and attempted rape in South Africa. However, in representative community-based surveys this number increased more than nine times- 2070 rapes per 100 000 women between the ages 17-48 in 2002 (Jewkes & Abrahams, 2002).

2.1.3 Factors associated with sexual assault

The use of alcohol represents a larger concern to the health of a population as many accidents and crime have been associated with high levels of alcohol consumption (Parry, 2000). The consumption of alcohol in developing countries has been shown to be lower than in more developed countries (Parry, 2000). This can be said to be as a result of poverty in many developing countries-as people do not have the monetary means to purchase alcohol. This finding however does not imply that the use of alcohol is not problematic in developing countries. This is the case in South Africa where it has been estimated that a third of both men and women engage in drinking dangerous levels of alcohol (Parry, 2000).

The concern with alcohol is both the role it plays in many of the chronic diseases such as heart disease as well as liver cirrhosis as well as many crimes associated with high levels of alcohol consumption (Parry, 2000). A study conducted on the association between alcohol and sexual assault demonstrated that 25% of American women have experienced sexual assault, of which half reported the involvement of alcohol by the perpetrator, the victim or both (Abbey et al,

2001). This study demonstrated an important aspect: the use of alcohol by perpetrator, victim or both may exacerbate certain risk factors to a sexual assault occurring (Abbey et al, 2001).

It is estimated that South African's consume nearly 5 billion litres of alcoholic beverages per year (Parry, 1998). Furthermore, it is estimated that there are proportionally more males across different race and age categories that drink compared to females. For example, African males in the age group 10-21, consume about 40% beer and spirits compared to African females of the same age group (32%) (Parry, 1998). However, the exact prevalence of sexual assault due to the use of alcohol cannot be determined due to the under-reporting of sexual assault cases in general (Abbey et al, 2001). Importantly, the role alcohol consumption plays is important in understanding how a sexual assault may occur.

Additional factors associated with sexual assault are the attitudes of both healthcare workers and the police towards victims of sexual assault. There are a number of studies that have examined how the attitudes and perceptions of healthcare workers and police influence the decision of victims to report or seek medical attention. According to Human rights watch (1997), the police are usually the first point of contact for many of victims of sexual assault and they are often met with unsympathetic and uninformed officials. Additionally, stereotypes and myths around victims of sexual assault have been found to be associated with victims' decision to not report or seek medical attention (Postmus et al, 2011).

2.1.4 Consequences of sexual assault

Sexual violence has a wide-reaching effect on the physical and mental health of victims. Sexual violence has been associated in causing physical injury as well as a range of sexual and reproductive health problems and risks (WHO, 2013). Among these risks are with regards to the mental health of victims, which may result in death. Mathews et al (2012) found that in South Africa there are long-term mental health consequences such as post-traumatic stress

disorder, distress as well as anxiety. According to the World Health Organization (WHO) report on sexual violence deaths following a sexual assault may be as a result of HIV infection, suicide or murder (2013). Additionally the study demonstrated that the sexual assault may affect a victim's social well-being as they may be 'stigmatised and ostracised by family and others' (WHO, 2013:149). In the WHO multi-country study, it was found that emotional stress and attempted suicide were higher among women who had ever experienced a sexual assault (WHO, 2012).

Research in Sub-Saharan Africa indicates that the first sexual experience of girls is forced and unwanted. In a study conducted at an antenatal care clinic in the Western Cape of South Africa, 353 non-pregnant adolescent girls (16 years of age), 32% reported that force was used in their first sexual experience (WHO, 2013). Additionally, sexual abuse has been associated with long-term mental and physical health consequences. For example in Cape Town, South Africa, a study demonstrated that 72% of pregnant teenagers and 60% of teenagers who had never been pregnant indicated the use of coercion into a sexual encounter (Jewkes et al, 2002). The coercion used in sexual assaults as well as the incident itself has a range of mental health consequences such as depression, anxiety and thoughts of suicide (Mathews et al, 2012; WHO, 2012).

A more dire consequence of sexual assault is that of HIV/AIDS. South Africa has one of the highest reports of rape to the police in the world as well as the largest number of people living with HIV/AIDS (Jewkes et al, 2013). The concern is with regards to the associated risk of contracting HIV as a result of a sexual assault. Thus far it has been demonstrated that men who rape engage in risky sexual behaviour, which may increase the likelihood of being HIV positive, which in turn increases the likelihood of a rape victim contracting HIV (Jewkes et al, 2013:3; NYDA, 2012). The study demonstrated that pregnant women who have experienced

more than one episode of sexual assault are 54% more likely to have HIV (Dunkle et al, 2004). These are some of the more significant consequences of sexual assault.

2.1.5 Post-assault behaviour among sexually assaulted victims: What victims do and why

Due to the nature of sexual assault, research has demonstrated on a number of occasions that victims often 'choose' not to report the assault (Lievore, 2003; Dewkes et al, 2003). As a result the reported rates by police, such as the South African Police Service, are lower than community-based survey results (Jewkes & Abrahams, 2002). The challenge that many governments face regarding sexual assault are two-fold: firstly, the levels of sexual assault remain obscured due to non-reporting, secondly little is known about the victims that do report in terms of accessing post-assault facilities such as medical and counselling services.

The concern with regards to reporting is the source of data. Each data source has its limitations. For example, police statistics is limited due to the fact that they record sexual assaults that have in fact been reported to them (Lievore, 2003). Sexual assault statistics that are obtained from crime surveys are said to be the most complete, however, the limitation of crime surveys has to do with methodology in terms of definitions of specific crimes. Crime surveys often have a wider definition of specific crimes, which the police may not necessarily use when classifying incident reports (Lievore, 2003).

A study conducted in Australia found that the report rate of sexual assaults to the police was 15% compared to 33% reported by the Crime and Safety Survey (Lievore, 2003). This inconsistency is demonstrated across the world due to both methodological differences among the police and crime survey collectors (Lievore, 2003). Furthermore, it has been found that victims are more open when interviewed in crime surveys compared to the police. This can be

explained by the level of training that police officials have had in terms of how best to deal with victims of sexual assault (Suffla et al, 2001; Naidoo, 2013).

There has been extensive research in more developed countries regarding what victims may or may not do after the assault. One such an example is with regards to Australia. In 2010, Clark and Quadara conducted a qualitative study with 33 women on their experience, collecting information on the characteristics of perpetrators as well as what the women did after the assault. It is important to keep in mind that this study cannot be taken to represent the global picture; it does however offer invaluable insights into both the relationship the victim has with the perpetrator as well as how this may affect the reporting of the assault.

According to literature most victims know their perpetrators and the sexual assaults occur in contexts of trust and familiarity (Clark & Quadara, 2010). In the qualitative study of the 33 women who had been sexually assaulted this was once again confirmed. Interestingly, the study also found that the relationship of the victim to the perpetrator influenced whether the victim reported the assault and if they sought any assistance- in that victims would not report or seek help if they knew the perpetrator due to fear that they would not be believed (Clark & Quadara, 2010). An additional factor to consider is the issue of other influences that may impact on the reporting of a sexual assault.

In a study conducted by Kaukinen (2001) among Canadian victims of sexual assault (2002) it was found that female victims tend to seek help from family and friends. Additionally, if the perpetrator is known to the victim, they are more likely to seek informal help from family and friends.

According to the National Management Guidelines for Sexual Assault in South Africa (Dewkes et al, 2003) the barriers to reporting and seeking assistance (medical) are further

affected by the fear of stigmatization associated with the lack of confidentiality among healthcare service providers and workers. The lack of empowerment of women in terms of understanding their rights and options as well as the dependency for financial care on the perpetrator serve as additional barriers (other than the location of an incident, the relationship to the perpetrator etc.) to both reporting the assault and seeking post-assault care (Dewkes et al, 2003). It would seem that the most common forms of sexual assault are the most vulnerable to non-reporting in South African Surveys as well as the police. These sexual assaults occur in relationships such as marriage, dating, in families as well as through threatening by strangers (Jewkes & Abrahams, 2002: 1232).

As a starting point the South African government vowed to address the issue of sexual assault victims through the creation of health packages to victims of sexual assault. This includes training medical personal to be sensitive to the victims, providing necessary information such as emergency contraception and antiretrovirals' (ARV's) as well as other measures such as counselling (Dewkes et al, 2003). These efforts arise out of the need to deal effectively with the high rates of sexual assault as a means of intervention after the assault occurs.

2.2. Theoretical and Conceptual Frameworks

2.2.1 Theoretical framework

Due to the nature of the current study, a few important aspects must be taken into account. For the most part, theories of sexual assault have been largely psychological in nature. The most prominent theory used to explain sexual assault is the victim-perpetrator relationship (USA-DoJ, 2010). To date there have been few if any theories developed to explain the level, determinants and post-assault behaviours among victims of sexual assault. However, Clark and

Quadara (2010) have proposed a framework to explore how sexual assault may arise. This model will be used to understand and potentially explain the levels, types and determinants of post assault behaviours among victims of sexual assault.

Clark and Quadara (2010) found that sexual offending was context dependent as an offender's behaviours and decisions were shaped by the interpersonal, situational and social contexts in which they occurred.

Their model proposes three key contexts that interact to produce a certain outcome, in this instance, the post-assault behaviour among victims. The three contexts are socio-cultural, situational and interpersonal (Clark & Quadara, 2010). The current study has adapted the framework through adding the post-assault behaviours that victims choose to engage in after the assault factoring in the various demographic and socioeconomic characteristics of victims.

There are three proposed contexts proposed by Clark and Quadara (2010) to describe how a sexual assault results. These contexts are the socio-cultural, situational and interpersonal contexts of individuals. They argue that the interaction of these three contexts more often than not result in the occurrence of a sexual assault. The current study has adapted their model of sexual assault to explain how and why victims choose a certain post-assault behaviour. According to Clark and Quadara (2010) the socio-cultural contexts (narcotics influence) include factors that inform behaviour and interaction of both victim and perpetrator. In the current study this is the use of alcohol and drugs. It is important to recognise the influence of drugs and alcohol as they play a significant role in the occurrence of sexual assault, however due to the specific focus on post-assault behaviours of the current study, these factors were not utilised in the analysis section. The second context- situational includes the location of where the assault occurred and whether there were witnesses. The last context is that of the

interpersonal, and this includes the nature of the relationship of the victim to the perpetrator and the perpetrators characteristics as well as the characteristics of victims.

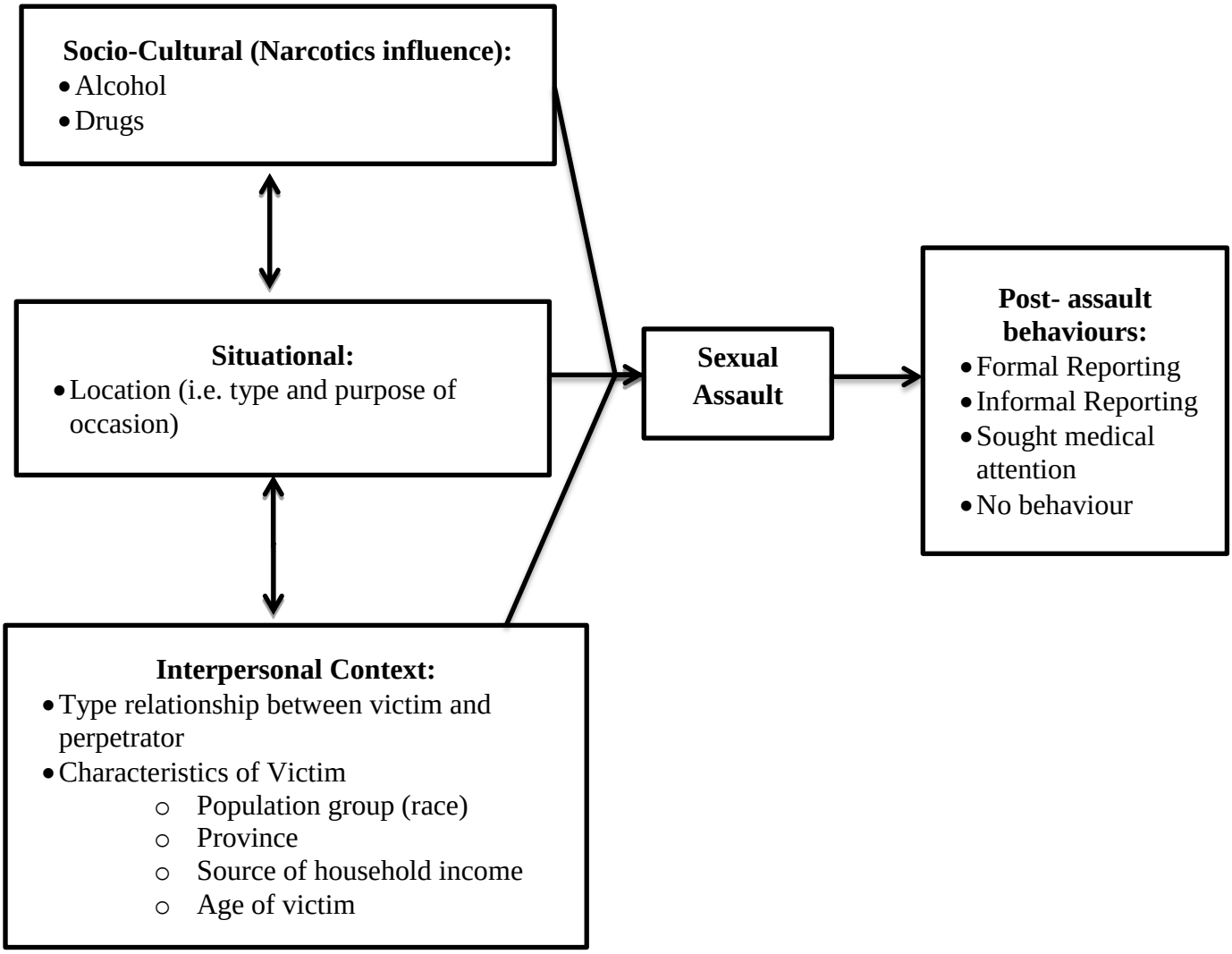


Figure 1: Adapted from the framework proposed by Clark and Quadara 2010

2.2.2 Conceptual framework

Clark and Quadara's (2010) framework is relevant in testing the association between selected demographic and socioeconomic characteristics of victims through examining the three proposed contexts. Each context contains certain characteristics that may influence both how a sexual assault may arise and in turn what post-assault behaviours are taken by the victims.

The interaction between socio-cultural, situational and interpersonal contexts may indicate what factors predispose women to sexual assault as well as once the sexual assault has occurred, these factors may influence what post-assault behaviours are taken by victims. For the purposes of the current study two out of three of the contexts have been examined, namely the interpersonal and situational contexts.

2.3. Hypothesis

The hypotheses to be tested in the study are:

H_0: There is an association between age, race, province, location of sexual assault, relationship to perpetrator and main household income and post assault behaviour in South Africa

H_A: There is no association between age, race, province, location of sexual assault, relationship to perpetrator and main household income and post assault behaviour in South Africa

CHAPTER 3: METHODOLOGY

This chapter discusses the methods of the current study. Particular reference is made to the data source, study population as well as the variables of interest in the study. A data analysis plan is also provided.

3.1. Data Source

This study has utilized data from the Victims of Crime Survey (VOCS). It reports crime from the victims' perspective.

3.1.1 Study design of the Victim of Crime Survey 2011 and 2012

The sample design for the VOCS 2011 & 2012 was based on a master sample (MS) originally designed for the Quarterly Labour Force Survey (QLFS) as a sampling frame (Statistics SA, 2012). The VOCS, like all other household-based surveys, uses a MS of primary sampling units (PSUs) which comprises census enumeration areas (EAs) that are drawn from across the country (Statistics SA, 2011; Statistics SA, 2012).

The sample for the VOCS used a stratified two-stage design with probability proportional to size (PPS) sampling of PSUs in the first stage, and sampling of dwelling units (DUs) with systematic sampling in the second stage. The sample was designed to be representative at provincial level. Primary stratification was defined by metropolitan and non-metropolitan geographic area type. The sample size for the VOCS 2011 & 2012 is approximately 30 000 dwelling units each (Statistics SA, 2011; Statistics SA, 2012).

3.1.2 Study population

The population of interest in the current study are women between the ages 15 and 65 who have been assaulted. It is important to note that the VOCS uses women from the age of 15; the reason behind this has to do with a 15 year old being of legal age to consent to participate in the survey (Statistics SA, 2011; Statistics SA, 2012). Furthermore the study population is representative of all four racial groups found in South Africa i.e. Black, Coloured, Indian and White. The target population of the survey consists of all private households in all nine provinces of South Africa (Statistics SA, 2011; Statistics SA, 2012).

3.1.3 Data cleaning and sample size

It must be noted that South Africa conducted two consecutive Victims of Crime Survey's for 2011 and 2012. The current study has merged the separate sections of each year and appended the two years' data. This has not only resulted in a richer source of data but has also allowed the study to compare sexual assault and post-assault behaviours between the two years. This has allowed for a deeper and more accurate representation of the problem of sexual assault and the resulting post-assault behaviours among victims of sexual assault in South Africa. The specific sections that have been merged in the 2011 VOCS are the person-file, household and sections 20-27 of VOCS 2011. The person file contains the demographic characteristics of victims of sexual assault such as age, province and gender. The household file contains both demographic and socio-economic characteristics of victims of sexual assault such as household income and race. Sections 20-27 contain specific information with regards to sexual assault such as the location of an assault and relationship to the perpetrators. The reason behind the merging of these sections is due to different demographic and socio-economic information that is contained in the person and household sections that are necessary for the current study; this includes age, race, source of income and so forth. In the 2012 VOCS, the household section and section 21-27 have been merged for the same reason as for 2011. The two datasets were

then appended so that the different demographics and socioeconomic characteristics of the two separate years were available for analysis.

Although the initial sample size for the VOCS (combined) was 18 856 155 individuals, the sample size was reduced to 80 330. This is because the current study specifically focuses on sexually assaulted women between the ages of 15 and 65.

3.2. Variables Used in the Data Analysis

3.2.1 Dependent variable

For the purpose of the current study, the dependent variable is the post-assault behaviours (PAB) that victims engage in after an assault has occurred. The outcome variable was constructed using the following variables:

- Reporting to the police (formal) found in section 26: This is when a victim reports the sexual assault to the police. The question asked in the 2011 and 2012 VOCS was: "Did you report the incident to the police?" The answer categories for this question were 1 for yes and 2 for no, 8/9 meant the victim did not specify yes or no.
- Reporting to other authority figures also found in section 26: This is when a victim of sexual assault reports the incident to someone either than the police. This includes a traditional leader, chief etcetera. The specific question asked was "Did you report the crime to anyone else (other than the police)?" The answer categories for this question were 1 for yes and 2 for no, 8/9 meant the victim did not specify yes or no.
- Medical attention also found in section 26: This is when a victim has sought medical assistance from a hospital, clinic, doctor or nurse. If a victim had reported that they had

experienced an injury from the assault they were then asked "Did any of these injuries require medical attention?" The answer categories for this question were 1 for yes and 2 for no, 8/9 meant the victim did not specify yes or no.

The outcome variable was constructed based on the above variables. There are four categories that a victim can possible fall into: a victim can either not engage in any of the above behaviours, this is called "no behaviour" this means that victims of sexual assault did not engage in any post assault behaviour; or a victim can engage in any combination of the three behaviours, such as "1 behaviour" (victims engaged in one of the three specified behaviours- reporting to the police or reporting to traditional leaders or seeking medical attention); "2 behaviours" (victims engaged in two of the specified behaviours- reporting to the police and reporting to traditional leaders, or reporting to the police and seeking medical attention or reporting to traditional leaders and seeking medical attention). Finally the victim can engage all three of the behaviours (victims choose to report to the police and report to a traditional leader as well as seek medical attention). No-behaviour is coded as "0", 1 behaviour is coded as 1 and , 2 or more behaviours has been coded as 2.

3.2.2 Independent variables

The demographic and socio-economic characteristics of sexually assaulted women are important to understand in order to create a more detailed snap-shot of sexually assaulted women in South Africa. Table 1 below includes all independent variables that are relevant in the understanding of the post assault behaviours that victims engage in.

The variables province, age and race were used for providing a more detailed view of the sexually assaulted victims that engaged in specific post-assault behaviours.

Age was presented as a continuous variable and was then categorised into five year age groups. The age group 0-14 was dropped from the study as these individuals were below the legal age to consent to being interviewed for the survey. Therefore, the study population includes victims aged 15 and older. Additionally, the category 50+ is included as older women are also at risk of being sexually assaulted and as results indicate they represent a large percent of the sample in the study.

Main household income was used as a measure of socio-economic status in the current study as this was the only available information from the survey provided. Furthermore, source of income is a measure of socio-economic status (SES) as it establishes whether an individual works or relies on income from others (unemployed). Main household income was re-categorised into three categories namely, salaries/wages/commission (1) and income from a business, remittances, maintenance, pensions, social grants and sales from farm products and services (2), as well as other/unspecified (3).

Location of sexual assault was used to establish if the area in which the assault occurred was associated with the post assault behaviours that victims engaged in after the assault. There are 6 categories for location: at home (1), in the street outside offices/shops (2), in someone else's home (3), in the street in a residential area (4), in an open space like field/park (5) or unknown/unspecified locations (6).

Relationship to perpetrator was used to examine if the relationship between the victim and perpetrator was associated with the post assault behaviours that victims engage in. There are 6 categories for relationship to perpetrator, namely, Relative/other household member (1), Known people from outside (2), other authority figures (3), Unknown community members (4), Unknown people from outside (5) and unspecified (6)

Table 1: Demographic and socioeconomic variables used in study and their definitions along with the specific questions asked in the original VOCS questionnaire

Variables	**Questions asked in the VOCS**	**Definition**
Demographic		
Population group (race)	**What population group does ..... belong to?**	Black African (1) Coloured (2) Indian/Asian (3) White (4)
Age		15-19 (1) 20-24 (2) 25-29 (3) 30-34 (4) 35-39 (5) 40-44 (6) 45-49 (7) 50+ (8)
Province		Western Cape (1) Eastern Cape (2) Northern Cape (3) Free State (4) Kwa-Zulu Natal (5) North West (6) Gauteng (7) Mpumalanga (8) Limpopo (9)
Socioeconomic		
Source of household income	**What are the sources of income for this household?**	Salaries/wages/commission (1) Business/social grants/pension etc. (2) Other (3)
Location	**Where did the offence take place?**	At home (1) In the street outside offices/shops (2) In someone else's home (3) In the street in a residential area (4) In an open space like a field or park (5) Unknown/unspecified (6)
Identity of the Perpetrator (Male)		
Relationship to perpetrator	**Who were the perpetrators?**	Relative/other household member (1) Known people from outside (2) Other authority figures (3) Unknown community members (4) Unknown people from outside (5) Unspecified (6)

3.3. Ethical Considerations

The study makes use of secondary data for the analysis and therefore no personal details of respondents were provided in the survey dataset and thus anonymity is guaranteed.

3.4. Data Management

The dataset was downloaded from Statistics SA (www.netstar.org.com). The data was analysed using STATA 12. STATA 12 is a statistical software used for describing and analysing data quantitatively.

3.5. Data Analysis

The analysis for the current study has been done according to the objectives set forth in this study. However, for the purposes of the current study the three forms of analysis will be done for each objective. This has been done to ensure each objective is achieved.

3.6. Answering the Objectives

Objective 1: To estimate the level of sexual assault in South Africa for 2011 & 2012 according to the VOCS

Frequency distributions of individuals who report cases to either the authority or any other concerned party have been provided. The second analysis to achieve objective one is to

calculate proportions. In this instance the proportion of sexual assault in relation to all other crimes has been calculated so as to understand the magnitude of the problem of sexual assault compared to all other crimes in South Africa.

The proportional calculation of sexual assault as well as other crimes has been calculated as follows:

SA (sexual assault) and all other crimes as specified in the variable table

$$Proportion\ of\ sexual\ assault = \frac{Specific\ crime}{Total\ crimes} * 100$$

Where specific crimes are: theft, assault, robbery, consumer fraud, hijacking and sexual assault. Total crimes is the sum of all specific crimes

Lastly, a calculation of the rate of sexual assault per 1000 women in South Africa has been reported. Below is the formula used to calculate the rate of sexual assault per 1000 women in South Africa in 2011 and 2012. The denominator is based on the mid-year population estimates for women aged 15 and older for the year 2011 and 2012, respectively.

$$Sexual\ assault = \frac{\#\ of\ sexual\ assaults}{Mid-year\ women\ 15+\ population}\ X\ 1000$$

The mid-year population estimate for 2011 is 18 229 333 (Statistics SA, 2011) and for 2012 is 19 465 633 (Statistics SA, 2013).

Objective2: To quantify the different post-assault behaviours of victims in South Africa.

In order to achieve this objective frequency distributions of the post-assault behaviour that victims have access to was calculated. Secondly, a calculation of the proportion of women who

engage in different post-assault behaviours was calculated. The proportional calculation of the various post-assault behaviours (PAB) that women engage in has been calculated as follows:

$$PAB = \frac{Specific\ post\ assault\ behaviour}{Total\ post-assault\ behaviours} * 100$$

Lastly, a calculation of the rate of post-assault behaviours (PAB) per 1000 women in South Africa for 2011 and 2012 has been reported.

$$PAB = \frac{\#\ of\ post-assault\ behaviours}{sexually\ assaulted\ women\ aged\ 15\ and\ older} \quad X\ 1000$$

Where 'sexually assaulted women aged 15 and older' has been taken from the survey used in the current study.

Objective 3: To determine the association between selected socioeconomic and demographic characteristics of victims and post-assault behaviours (PAB)

To achieve this objective, bivariate cross-tabulations have been used. The use of cross-tabulations have allowed the researcher to test for an association between the various demographic and socioeconomic characteristics of the victim as well as perpetrator characteristics and post assault behaviour (PAB). For the purposes of the current study, the use of the 'Goodman and Kruskal's lambda' will provide the necessary test of association. The 'Goodman and Kruskal's lambda' provides an index of predictive ability that is it is able to demonstrate whether there is a predictive association between the variables of interest and the outcome variables. Furthermore, it is more appropriate to use than the traditional chi-squared due to the sample size being smaller as well as being able to demonstrate the actual strength of the association between the predictor variables and outcome variable (Fletcher, 1995). If the

lambda takes on a value of 1 it indicates complete predictive association between the independent variable (s) and the outcome variable (Fletcher, 1995).

$$\lambda = \frac{\epsilon_1 - \epsilon_2}{\epsilon_3}$$

Where:

ϵ_1 is the overall non-modal frequency, and ϵ_2 is the sum of the non-modal frequencies for each value of the independent variable

Values for λ (lambda) range from zero (no association between independent and dependant variables) to one (perfect association).

The last test to be used is the multinomial logistic regression. In order to examine the association between the selected demographic and socioeconomic variables and the outcome variable (post-assault behaviours), a multinomial logistic regression has been employed in order to assess the effect of age, race, province, main household income, and location of the assault, relationship to perpetrator with controls.

The multinomial logistic regression producing coefficients was used to examine the factors that affect post-assault behaviours among sexually assualted women in South Africa. The multinomial logistic regression is used to analyse the relationship between a categorical outcome variable with a set of predictor variables (Healy, 2006). This analysis tests the probability of all independent variables being statistically significant in a specific category, compared to the selected baseline outcome category of the outcome variable (Hilbe, 2009). Furthermore, in testing all independent variables the regression omitted the first factor by using it as a reference group. This model has also been used because it does not assume normality, linearity or homoscadascity (Healy, 2006).

The formular for this test is:

$$\mathbf{Ln\ (p_i / 1\text{-}p_i)} = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \beta_3 x_{i3} + \beta_4 x_{i4} + \beta_5 x_{i5} + \beta_6 x_{i6} + \beta_7 x_{i7} + \square_i$$

Where:

Ln (p_i / 1-p_i) = log-odds ratio

β = parameters

β_0 = beta for intercept

β x_i = beta for predictor variables

$\square_i$ = variation in the model

In the result section of the study, coefficients have been reported. An important aspect of the multinomial logistic regression it estimates k-1 models, where k is the number of levels of the outcome variable (UCLA, 2014). In the current study, the outcome variable, behaviour, has three levels, namely, no-behaviour (0), at least 1 behaviour (out of the three) (1) and 2 or more behaviours (2). The reference group has been set as 0 (no-behaviour). The multinomial used has estimated a model for at least 1 of the three behaviours (1) relative to no-behaviour (0) as well as a model for 2 or more behaviours (2) relative to no-behaviour (0). The interpretation used for the multinomial logistic regression is that for a unit change in the predictor variable, the logit outcome relative to the reference group is expected to change by its respective parameter estimate if all other variables are held constant (UCLA, 2014:2).

In order to determine if the regression coefficient for each of the independent variables are statistically different from zero, if all other variables are included in the model the confidence intervals (CI) have been used. If the CI includes zero, we fail to reject the null hypothesis that a

particular regression coefficient is zero with all other predictor variables included in the multinomial regression (UCLA, 2014). An added advantage of CI is that it provides a range where the "true" parameter may be (UCLA, 2014).

CHAPTER 4: RESULTS

Table 2 below shows the percentage distribution of select demographic and socio-economic characteristics of sexually assaulted women in South Africa. The percentage distribution of age indicates that 36.36% of sexually assaulted women are between the ages 15-24. This is followed by women between the ages of 25-34 (29.19%). Women between the ages 35-44 years constitute the smallest percentage of sexually assaulted women (12.51%). Furthermore, the data demonstrates that the majority of women are 'black Africans" (85%), followed by coloureds (13%).

Table 2: Demographic and socioeconomic characteristics of sexually assaulted women, VOCS 2011-2012**; as well as the percentage and frequency distribution of post-assault behaviour per demographic and socioeconomic characteristic

Characteristic	**Frequency**	**"no behaviour"**	**"one behaviour"**	**"two behaviour"**	**"three behaviours"**
Total (percentage)	**80 330** ***(100)***				
Demographic Variables					
Age					
15-24	29 206 *(36.36)*	17 686 *(33.89)*	1 611 *(38.22)*	3 389 *(27.85)*	6 520 *(55.42)*
25-34	23 448 *(29.19)*	16 783 *(32.16)*	806 *(19.12)*	3 681 *(30.25)*	2 178 *(18.51)*
35-44	10 053 *(12.51)*	6 483 *(12.42)*	271 *(6.43)*	1 820 *(14.96)*	1 479 *(12.57)*
45+	17 623 *(21.94)*	11 230 *(21.52)*	1 527 *(36.23)*	3 278 *(26.94)*	1 588 *(13.50)*
Race					
Black African	68 371 *(85.11)*	44 201 *(84.71)*	4 215 *(100)*	9 840 *(80.87)*	10 115 *(85.98)*
Coloured	10 570 *(13.16)*	6 592 *(12.63)*	0	2 328 *(19.13)*	1 650 *(14.02)*
White	1 389 *(1.73)*	1 389 *(2.66)*	0	0	0
Province					
Western Cape	9 256 *(11.52)*	7 606 *(14.58)*	0	0	1 650 *(14.02)*
Eastern Cape	13 610 *(16.94)*	4 651 *(8.91)*	232 *(5.50)*	475 *(3.90)*	8 252 *(70.14)*
Northern Cape	1 820 *(2.27)*	655*(1.26)*	0	180 *(1.48)*	985 *(8.37)*
Free State	4 628 *(5.76)*	3 150 *(6.04)*	735 *(17.44)*	409 *(3.36)*	334 *(2.84)*
Kwa-Zulu Natal	23 571 *(29.34)*	17 112 *(32.79)*	376 *(8.92)*	6 083 *(49.99)*	0

North West	4 308 *(5.36)*	3 764 *(7.21)*	0	0	544 *(4.62)*
Gauteng	7 210 *(8.98)*	4 470 *(8.57)*	0	2 740 *(22.52)*	0
Mpumalanga	5 259 *(6.55)*	2 625 *(5.03)*	1 612 *(38.24)*	1 022 *(8.40)*	0
Limpopo	10 668 *(13.28)*	8 149 *(15.62)*	1 260 *(29.89)*	1 259 *(10.35)*	0
Socioeconomic Variables					
Main House- hold income					
Salaries/wages/commission	30 582 *(38.07)*	22 408 *(42.94)*	718 *(17.03)*	4 821 *(39.62)*	2 635 *(22.40)*
Business/social grants/pension etc.	49 748 *(61.93)*	29 774 *(57.06)*	3 497 *(82.97)*	7 347 *(60.38)*	9 130 *(77.60)*
Location					
At home	7 015 *(8.73)*	0	2 220 *(52.67)*	1 439 *(11.83)*	3 356 *(28.53)*
In the street/outside offices/shops	2 837 *(3.53)*	0	1 260 *(29.89)*	592 *(4.87)*	985 *(8.37)*
In someone else's home	2 418 *(3.01)*	0	0	2 084 *(17.13)*	334 *(2.84)*
In the street in a residential area	1 014 *(1.26)*	0	0	0	1 014 *(8.62)*
In an open space like field/park	11 437 *(14.24)*	0	0	5 905 *(48.53)*	5 532 *(47.02)*
Unknown	55 609 *(69.23)*	52 182 *(100)*	735 *(17.44)*	2 148 *(17.65)*	544 *(4.62)*
Relationship to perpetrator					
Relative/other household member	5 532 *(6.89)*	0	0	0	5 532 *(47.02)*
Known people from outside	7 289 *(9.07)*	0	918 *(21.78)*	2 681 *(22.03)*	3 690 *(31.36)*
Other authority figures	2 686 *(3.34)*	0	232 *(5.50)*	1 469 *(12.07)*	985 *(8.37)*
Unknown community member	6 619 *(8.24)*	0	0	5 605 *(46.06)*	1 014 *(8.62)*
Unknown people from outside	2 330 *(2.9)*	0	2 330 *(55.28)*	0	0
Unknown/unspecified	55 874 *(69.56)*	52 182 *(100)*	735 *(17.44)*	2 413 *(19.83)*	544 *(4.62)*

Additionally, the province percentage distribution of sexually assaulted women demonstrates that Kwa-Zulu Natal comprises of the largest sexually assaulted population (29%). This is followed by the Eastern Cape (17%), Limpopo (13%), Western Cape (12%) and Gauteng (9%). The Northern Cape constitutes 2 % of sexually assaulted women in South Africa.

When examining the socio-economic characteristics of sexually assaulted women, women who receive an income from social grants constitute 62% of the study population. The remaining

38% receive an income from salaries/wages and commission. According to Table 1 most sexual assaults occur in open spaces like a field or park (14%). This is followed by 9% of sexual assaults occurring at the victims own home, 4 % occurring in the street in a residential area and 3% occurring in someone else's home. The vast majority of the incidences were unspecified (69%).

Furthermore 9% of the perpetrators were known members from inside their community, unknown community members constitutes 8%, while family or household members only accounted for 7% of incidents. Victims further admitted that 3% of incidents were perpetrated by other authority figures and unknown people from outside.

Table 2 further shows the demographic and socioeconomic characteristics of victims who engage in certain post-assault behaviours. According to the results approximately 35% of victims who engage in no behaviour are between the ages of 15-24. A further 6% who engage in one behaviour (out of the three) are between the ages 35-44 and 36% of victims who engage in one behaviour are 45 and older. Approximately 30% of victims who engage in any two behaviours are between the ages of 25-34 years, and approximately 55% of victims who engage in all three post-assault behaviours are between the ages of 15-24.

According to Table 2, approximately 85% of victims who engage in no behaviour are Black Africans. There are no coloured or white victims who engage in one post-assault behaviour. The results further indicate that approximately 81% of victims who engage in two behaviours are Black African compared to coloured victims (19.13%). Fourteen percent of victims who engage in all three behaviours are coloured compared to Black Africans (85.98%).

The results from Table 2 further indicate that approximately 33% of victims who engage in no behaviour are from Kwa-Zulu Natal. Thirty-eight percent of victims who engage in one

behaviour are from Mpumalanga. Approximately 50% of victims who engage in two post-assault behaviours are from Kwa-Zulu Natal and 70% of victims who engage in all three behaviours are from the Eastern Cape.

The results also indicate that 57% of victims who engage in no behaviour receive income from social grants and pensions. Victims who engage in one behaviour (82.97%), two behaviours (60.38%) and three behaviours (77.60%) receive an income from social grants and pension. The results from Table 2 also show that 53% of victims who engage in 1 behaviour experienced a sexual assault at home. Approximately 49% of victims who engaged in two behaviours experienced the assault in an open space like a field and 47% of victims who engaged in three post-assault behaviours also experienced the assault in an open space.

The relationship to the perpetrator indicates that 55% of victims who engage in one behaviour were sexually assaulted by unknown people from outside the community. Victims who engaged in two behaviours reported that they were sexually assaulted by unknown community members (46.06%) and 47% of victims who engaged in all three behaviours indicated that they were assaulted by relatives.

Table 3: Proportional calculation of sexual assault in relation to all other crimes in South Africa, displaying frequency of each crime and proportions as a percentage for 2011 and 2012

Crime	Frequency	Proportion (as percentage %)
Theft	2 257 873	39.96
Assault	1 459 622	25.83
Robbery	1 327 128	23.49
Consumer Fraud	383 262	6.78
Hijacking	141 819.26	2.51
Sexual assault	80 330	1.42
Total	**5 650 034**	**100**

A proportion of sexual assault in relation to all other crimes has been calculated so as to understand the magnitude of the problem of sexual assault compared to all other crimes in South Africa.

Table 3 represents the proportion contribution of all other crimes in relation to sexual assault in South Africa. According to this data, sexual assault contributes the least to overall crime (1.42%), whereas theft contributes approximately 40% and general assault contributes almost 26%. Hijacking seems to also account for more of the crimes (2.51%) compared to sexual assault.

4.1. Rate of Sexual Assault in South Africa

The rate of sexual assault was calculated according to the Victims of Crime Survey based on the weighted female population for the Victims of Crime Survey 2011-2012.

Table 4: Rate of sexual assault based on female mid-year population estimates for 2011 and 2012 and female sexual assault for the two years combined

Year	Female population	Female sexual assault	Rate per 1000 population
2011	18 229 333	192 169	10.54
2012	19 465 633	96 900	4.98

According to table 4 the rate of sexual assault in South Africa for 2011 and 2012 is just over 4 per 1000 women aged 15 and older. The results indicate that in 2011 the rate of sexual assault was higher (10.54) than in 2012 (4.98).

Table 5: Proportion Calculation of the three main post-assault behaviours (PAB) sexually assaulted women engage in, displaying frequency of each behaviour and the proportions as a percentage

PAB	Frequency	Percentage
Formal reporting	55 544	43%

Informal reporting	30 627	24%
Medical attention	41 742	33%
Total	**127 913**	**100**

Table 5 displays the proportional contribution of the three post-assault behaviours. Formal reporting (police) constitutes 43% of post-assault behaviour, followed by medical attention (24%) and other/informal reporting (33%).

Table 6: Combined outcome of post- assault behaviours for 2011-2012

Combined outcome of post- assault behaviour	**Frequency**	**Percentage**
No Behaviour	52 182	64.96
One Behaviour	4 215	5.25
Two behaviours	12 168	15.15
Three behaviours	11 765	14.65
Total	**80 330**	**100**

Frequencies based solely on women who experienced sexual

According to Table 6, 65% of victims of sexual assault for the period 2011-2012 engaged in 'no behaviour'. Only 5% of victims of sexual assault engaged in 1 behaviour whereas a total of 15% of victims engaged in 2 behaviours. The combination of two or more behaviours (formal reporting, medical attention and other reporting), also accounts for approximately 15% of post-assault behaviours.

4.2. Rate of Post-assault Behaviour in South Africa

The rate of post-assault behaviours per 1000 women in South Africa was calculated. According to the Victims of Crime Survey based number of post-assault behaviours for 2011 and 2012, respectively.

Table 7: Rate of Post-assault behaviours (PAB) per 1000 sexually assaulted female population

Year	Number of Post-assault behaviours	Number of female sexual assaults	Rate per 1000 female population
2011	143 997	192 169	1114.80
2012	64 067	96 900	661.17

According to Table 7, in 2011 there were approximately 1115 post-assault behaviours per 1000 women compared to 2012 with 661 post-assault behaviours per 1000 women in South Africa. Results indicate that post-assault behaviours were higher in 2011 (1114.80) compared to 2012 (611). The PAB results indicate that women engaged in various combinations of post-assault behaviours. Post-assault behaviours are not proportional (1:1) as women may choose to engage in more than one post-assault behaviour at any given point in time. Furthermore, PAB results are in line with the sexual assault rates obtained in Table 4 which also indicates that there was a reduction in sexual assaults in South Africa for the two surveys.

4.3. Associations between Demographic and Socio-economic Characteristics of Victims and Post-assault Behaviours (PABs)

Table 8 is a display of the Goodman Lambda test of prediction/association. According to the table, relationship to the perpetrator and location of the assault are significant predictor of certain post-assault behaviours/behaviours occurring.

Table 8: Goodman and Kruskal's Lambda test of prediction/association between post-assault behaviour and selected demographic and socioeconomic characteristics of respondents

Post-assault behaviour	Lambda
Age (female victims)	0.0301
Race	0.0000
Province	0.0765
Main house-hold income	0.0000
Location	0.4242

Relationship to perpetrator	0.4082

According to Table 8, the relationship the victim has to the perpetrator is 41% likely to predict the outcome variable. Additionally, the location of the sexual assault is 42% likely to predict the outcome variable. The province from which the victim is from has a 7% likelihood of predicting the outcome variable.

The results obtained in the Goodman and Kruskal's Lambda are further confirmed by the Chi-square test of association which predicts that relationship to perpetrator, location of incident and province are significantly associated with the outcome variable. The only difference between the results obtained in the Goodman and Kruskal's Lambda and Chi-square is the association between the province the victim is from and the outcome variable. According to the Goodman Lambda, province has only a 7% likelihood that it is associated with whether they engage in any post-assault behaviour or not, however, according to the chi-square test of association, province is significantly associated with the outcome variable (see appendix A).

4.4. Multivariate Analysis

Variables that were included in the Multinomial logistic regression were selected based on the strength of their association and prediction based on the results obtained from both the Goodman Lambda and the Pearson chi-square.

Table 9: Multinomial Logistic Regression displaying the Coefficients and Confidence Intervals (CIs) of post-assault behaviours among sexually assaulted women in South Africa controlling age, race, province, location of assault, relationship to perpetrator as well as main household income.

Behaviour	**Coefficient**	**Confidence Intervals**
Reference Category – 0 (No behaviour)		
1 (One of the three behaviours: formal reporting, other reporting and seeking medical		

attention)		
Relationship to perpetrator	0.000404	[-45.419- 45.419]
Location of assault	-0.230026	[-0.400- (0.620)]*
Main household income	0.972243	[-0.859- 2.804]
Province	0.277874	[-0.089- 0.645]
Race	0.59577	[-0.715- 1.906]
Age	0.049934	[-0.291- 0.391]
2 (A combination of two or more behaviours)		
Relationship to perpetrator	0.011399	[-45.408- 45.430]
Location of assault	-0.242281	N/A
Main household income	-0.198523	[-2.351- 1.954]
Province	-0.613154	[-1.145- (0.081)]*
Race	-1.340371	[-4.026- 1.345]
Age	-0.067139	[-0.452- 0.318]

*(Post assault behaviour: No behaviour is the base outcome); *p<0.05, statistically significant*

Table 9 gives the estimated multinomial logistic regression coefficients for the model used. One model has been used in order to determine the effect that selected demographic and socio-economic characteristics have on determining whether women will choose to engage in one or more post assault behaviours or not.

No behaviour has been used as the reference group in Table 9 which is used to establish the likelihood that a victim would engage in no- behaviour compared to one or more behaviours.

For one unit increase in relationship to perpetrator, the multinomial log-odds is 0.00040 units higher for being in the "at least 1 behaviour" category relative to no-behaviour given all other predictor variables in the model are held constant.

According to the results, the multinomial log-odds for at least 1 behaviour relative to no-behaviour would be expected to decrease by 0.230 units while holding all other predictor variables in the model constant. The multinomial log-odds for main household income is 0.972 units higher for being in the "at least 1 behaviour" category relative to no-behaviour given all other predictor variables in the model are held constant.

The multinomial logit estimate for one unit increase in province is 0.277 units higher for being in the “at least 1 behaviour” category relative to no-behaviour given all other predictor variables in the model are held constant. According to the results, the multinomial log-odds for race is 0.596 units higher for being in the “at least 1 behaviour” category relative to no-behaviour given all other predictor variables in the model are held constant.

The multinomial log-odds for age is 0.049 units higher for being in the “at least 1 behaviour” category relative to no-behaviour given all other predictor variables in the model are held constant. This is the multinomial logit estimate for one unit increase in relationship to perpetrator is 0.011 units higher for being in the “2 or more behaviours” category relative to no-behaviour given all other predictor variables in the model are held constant. Additionally, the multinomial logit estimate for location of assault for 2 or more behaviours relative to no-behaviour would be expected to decrease by 0.242 units while holding all other predictor variables in the model constant.

The multinomial log-odds for main household income for 2 or more behaviours relative to no-behaviour would be expected to decrease by 0.199 units while holding all other predictor variables in the model constant. According to the results, the multinomial log-odds for province for 2 or more behaviours relative to no-behaviour would be expected to decrease by 0.613 units while holding all other predictor variables in the model constant.

The multinomial log-odds for race for 2 or more behaviours relative to no-behaviour would be expected to decrease by 1.340 units while holding all other predictor variables in the model constant. Additionally, the multinomial log-odds for age for 2 or more behaviours relative to no-behaviour would be expected to decrease by 0.067 units while holding all other predictor variables in the model constant.

Based on the confidence intervals from Table 9 all predictor variables' (relationship to perpetrator, main household income, province, race and age) regression coefficients of at least 1 behaviour relative to no-behaviour are not statistically different from zero as zero is included in the corresponding CIs. The regression coefficients of location of assault can be said to be statistically different from zero as zero is not included in the corresponding confidence intervals [-0.400- (-0.062)].

Additionally, when examining the regression coefficients of 2 or more behaviours relative to no-behaviour, it can be concluded that all predictor variables' (relationship to perpetrator, location, main household income, race and age) are not statistically different from zero as zero is included in the corresponding CIs. The regression coefficients of province can be said to be statistically different from zero as zero is not included in the corresponding confidence intervals [-1.145- (-0.081)].

CHAPTER 5: DISCUSSION

Sexual assault represents a much larger social issue that remains "hidden" and unreported by the vast majority (Christofides, 2006). It also represents a portion of the many crimes that plague South Africa. What is not yet understood is the overall contribution of sexual assault in relation to all other crimes in South Africa. The current study has found that sexual assault represents just over 1% of crime, in comparison to theft (40%) and even hijacking (3%). Several studies concur this finding and argue that the severe under-reporting of sexual assault inhibits proper evaluation of the impact and consequences of sexual assault in many countries including South Africa (Quadara & Clark, 2010; Christofides, 2006)

In a study conducted in South Africa it was found that due to the traumatic experience of rape, victims are less likely to report the incident. This study also found that women do not describe forced intercourse as rape when it is with a current or former partner (Orkin et al., 2000). A study conducted by the Department of Health in the United Kingdom, highlighted that issues of under-reporting were potential barriers to fully understanding the impact that sexual assault has on a population in terms of health (UKDoH, 2005). These findings confirm the results of the current study: that reported sexual assault rates remain an under-estimate of the actual problem that sexual assault represents.

There are a few studies that contrast this study's finding that sexual assault crime statistics are the lowest compared to all other crimes. According to the SAPS crime statistics report, sexual assaults or rather sexual offences constitute 10% of all crimes, which is the fourth lowest after murder, attempted murder and robbery (SAPS, 2011; SAPS, 2012). However this estimate is based on sexual assault to women, men and children younger than the age of 15 which provides an inaccurate representation of the problem of sexual assault to women of the age 15 and older which is the focus of the current study.

One of the objectives of the current study was to estimate the level of sexual assault in South Africa. Rates of sexual assault are another way of estimating the magnitude of the problem at hand. The current study found that for 2011 and 2012 the rate of sexual assault ranged between 10.54 and 4.98 per 1000 women aged 15 and older, respectively. This means that between 11 and 5 in every 1000 women were sexually assaulted between 2011 and 2012, respectively. National figures indicate that there were 135 sexual assaults per 100 000 population between 2011 and 2012, which is approximately 1.3 per 1000 population (SAPS, 2011; SAPS, 2012). Once again these results are inclusive and as a result the proportions must be read with caution. Research suggests that due to the high number of women who do not report sexual assault, estimating levels, proportions and rates of sexual assault are limited in the actual information they provide (Orkin et al., 2000).

The third objective of the current study was to determine the association between selected demographic and socioeconomic characteristics of victims and post-assault behaviour (PAB) According to the results from the current study, majority of all sexually assaulted victims in South Africa are "Black Africans" (85%), followed by "Coloureds" (13%) and "White" (2%). The race differentials are in stark contrast to the 1998 Victims of Crime Survey (VOCS) that found the majority of women who were sexually assaulted to be Coloured and Indian (2.7%), followed by Africans (2.2%) and Whites 0.9% (Orkin et al., 2000). The 1998 VOCS was the first survey to be conducted on crime in South Africa post- apartheid. As a result, the findings were expected given that South Africa was a newly formed democracy and still adjusting to the transition from apartheid (Louw, 2006; Kruger et al., 2008).

This differential among the different race groups in South Africa can be attributed to cultural traditions and gender roles both pre and post- apartheid. Research on culture and tradition and how these inform and shape how gender roles are negotiated in a particular context seem to

explain the differentials among the different population groups. In South Africa, African cultures are patriarchal in nature and view the woman's role as submissive and passive (Bower, 2014). This in line with the race differentials the current study found: that over three quarters (85%) of sexual assaults occur to Black Africans, which are predominantly traditional in nature. In a study conducted on women and children' rights, Bower (2014) demonstrated that women, even after more than twenty years of democracy, are viewed as inferior to men. The study also found that although women's rights are embedded in South Africa's constitution, due to traditional roles and perception of a woman in a "man's world', there are still men who blatantly refuse to acknowledge the rights of women (Bower, 2014).

In addition to the concern regarding women's rights is the issue of the age at which the sexual assault occurs. The main focus of the current study were women aged 15 and older who had been sexually assaulted. According to the results, of key concern are women aged 15-24 (18%), women 50 years and older (18%) as well as women of the ages 25-34 (approximately 15%). These results are not surprising given that women in these age groups are the most vulnerable to sexual assault in general (Planty et al., 2013). In a trend-analysis study conducted in the United States of America, it was found that women below the age of 34 were more likely to be victims of sexual assault (Planty et al., 2013). The National Youth Development Agency (2012) of South Africa has as also noted that there is a high mortality rate among youth of the ages 29-34 as a result of violent and risky behaviour. This behaviour change may in turn predispose women to becoming victims of sexual assault. Furthermore, youth from the ages 15-34 were found to engage in risky health behaviours that predisposed them to the risk of becoming victims of violent crimes that may or may not result in death (Reddy et al., 2010). The sexual assault of older women is not unheard of particularly in South Africa (Stats SA, 2000). However, the calculation of sexual assault to women 50 years and older is often found to be low as a result of the population size of this age group (Stats SA, 2000). Those at high

risk of sexual assault are women 15-34 as the current study has demonstrated. The potential health consequences to this age group of women are in terms of their reproductive health, which includes the risk of HIV infection as well as unwanted pregnancies. In a study examining the frequency, health consequences and treatment outcomes of 154 sexually assaulted women, it was found that approximately 15% attributed contracting HIV from being sexually assaulted (McFarlane et al., 2004). Additionally, 20% of the 154 women in the study reported an unwanted pregnancy (McFarlane et al., 2004).

The provincial characteristic of sexual assaulted victims indicated that the majority of sexually assaulted victims are from Kwa-Zulu Natal (29%) followed by the Eastern Cape (17%) with Limpopo constituting only 2% of sexually assaulted victims. However, in a study conducted in three provinces in South Africa, the Eastern Cape, Mpumalanga and Northern Province found that sexual assault was highest the in Mpumalanga 7.2%, followed by the Northern Province 4.8% and Eastern Cape 4.5% (Jewkes et al., 1999). This finding is in stark contrast to this study's finding which found that there are more sexually assaulted victims in Kwa-Zulu Natal.

The income distribution of sexually assaulted women in this study indicated that 62% received income from informal business and social grants compared to only 38% who were formally employed and received a salary. This finding is consistent with a study in the United States of America that found household income to be associated with the rate of sexual assault. According to Planty et al. (2013) women who are not employed or receive very low income are more likely to be victims of sexual assault. However, this does not mean that poorer women are the only victims of sexual assault, it implies that they are the most vulnerable given their situation: low socioeconomic status, poor or sub-standard living conditions.

The location of where a sexual assault occurred is of concern particularly in light of crime in South Africa. Planty et al. (2013) found that majority of sexual assaults occur at or near a

victim's home (55%), which is followed by "in open area/public transportation" (15%) (2014). The current study found contrasting results: Most sexual assaults in South Africa take place in an open field/space (14%) which is followed by "at victims home" (9%). In another study it was found that sexual assaults occur more frequently on the way from work or school (34%) which is followed by the victim's home (14%) (Blake et al, 2014). Although the results from both Blake et al. (2014) and Planty et al. (2013) contrast the current study's findings on the location of sexual assaults; the context of South Africa and the study sites are different economically, politically and socially.

Results from the current study indicate that 9% of perpetrators are known individuals from outside of the community. Furthermore, 8% of perpetrators according to the current study are unknown members from the community with relatives as perpetrators accounting for only 7% of sexual assaults. Blake et al. (2014) found similar results when examining the relationship of the perpetrator and victim in Sao Paulo in which 80% of perpetrators were "unknown" and 67% of perpetrators were not related to the victim. In another study by Planty et al. (2013), it was found that 78% of perpetrators were "non-strangers", 38% were casual acquaintances and 6% were relatives. These results confirm what the current study has found: sexual assaults are less likely to be perpetrated by relatives compared to non-strangers and acquaintances.

This is a significant finding in terms of healthcare and the general well-being of sexually assaulted women in South Africa. Women who have been sexually assaulted have specific needs in terms of health, namely, HIV prevention, prevention of pregnancy and other STI's as well as psychological assistance in dealing with the trauma. However, as has been a reoccurring theme, reporting rates of sexual assaults remain low and obscured. This study was concerned with the identifying factors that influence specific post-assault behaviours among

victims in terms of demographic and socioeconomic characteristics. It is important to bear in mind that sexually assaulted women make-up a unique part of the South African population.

The second objective of the current study was to identify the types and levels of post-assault behaviour among victims of sexual assault. Understanding both what specific post-assault behaviours exist as well as which of those sexually assaulted women engage in is an important step in understanding how to address the issue of under-reporting. This study has found that there are three dominant post-assault behaviours that sexually assaulted women engage in, namely, reporting to the police (43%), seeking medical attention (33%) and finally reporting the incident to other authority figures such as traditional leaders/chiefs (23%). This result merely indicates that women do engage in post-assault behaviour after an incident, however in order to comprehend the extent of these behaviours, the current study identified four possible outcomes based on the results of the three dominant post-assault behaviours.

The main objective of this study was to quantify the levels and types of post-assault behaviours among sexually assaulted women in South Africa. Interestingly, although it appears at first glance that women utilise some form of post-assault behaviour, an astounding 65% engage in no behaviour (Table 5). This result is consistent with a study conducted in South Africa aimed at identifying the experiences of women after the assault in terms of service delivery and why they chose a specific service (Christofides et al., 2006). Christofides et al. (2006) found that a number of factors were involved when a victim makes the decision to seek assistance after the assault. These factors include travelling time, if the victim was required to return to the hospital/clinic, if an extensive medical exam was required, and most importantly, the attitudes of the staff/medical professionals (Christofides et al., 2006). Most importantly, the perceived attitudes of healthcare staff was identified as being a more important factor that influenced if a

victim would choose to seek assistance after the assault compared to travel time and cost of reaching a clinic (Christofides et al., 2006).

Attitudes of healthcare workers and police in the treatment of sexually assaulted victims has been found to be a significant predictor of engaging in any form of post-assault behaviour in several studies including Christofides et al. (2006). In a qualitative study conducted in Australia it was found that negative stereotypes, attitudes and myths regarding sexual assault were important aspects that influenced whether victims would seek assistance or not (Fanflik, 2007;Clark & Quadara, 2010). In another American study carried out by the American Prosecutors Research Institute, it was also found that attitudes of healthcare workers and police (or rather the justice system in general) were important factors that influenced the decision to seek assistance (Warner et al., 2005; Fanflik, 2007).

In 1996, Ferraro (1996) argued that most victims of sexual assault in America chose to not report or seek medical attention due to fear of re-victimization by police and medical workers. More than a decade later the same result was found by Postmus et al. (2011). In the study by Postmus et al. (2011), the factors that influenced attitudes and behaviour of sexually assaulted women were examined and it was found that victims decide not to report or seek medical attention due to the fear of being re-victimized. In 2005, Hooven explored how rape myths may impact on the help-seeking behaviour of victims. She effectively demonstrated that victims of sexual assault are less likely to engage in post-assault behaviours as a result of the myths surrounding why women are raped (Hooven, 2005). Another study conducted in South Africa examined societal perceptions and attitudes towards rape and how this may influence the decision to seek assistance. According to Rumney et al. (2010) stereotypes and myths on rape are wide-spread in the South African community and these same stereotypes are shared by the criminal justice system.

Stigmatization as a result of stereotypes and myths regarding rape are dominant throughout history, regardless of country or society. This stigmatization has had consequences for victims of sexual assault. It plays a vital role in determining whether victims will engage in any post-assault behaviour. The current study has demonstrated that this is perhaps the case too in South Africa. Of the 80 330 sexually assaulted victims in South Africa 2011-2012, 5% engaged in a post-assault behaviour, 14% engaged in at least two behaviours and 15% engaged in all three (report to police, traditional leader/chief as well as seeking medical attention). These results are low when compared to the 65% of victims who do not engage in any behaviour. A calculation of the post-assault behaviours revealed that approximately 11 women in every 1000 opted to engage in some sort of post-assault behaviour in 2011, compared to a mere 5 women in every 1000 for 2012. This could have something to do with the sexual assault rates for both 2011 and 2012 in that there was a decrease. Important to note is the differences in post-assault behaviours compared to sexual assault rates for the same period. There is a clear disproportionality between sexual assault rates and post-assault behaviours engaged in. This disproportionality further strengthens the argument that there are factors beyond the individual that affect whether a victim of sexual assault engages in any form of post-assault behaviour or not.

Although findings suggest that influences of societal perception, attitudes of healthcare workers as well as police and the criminal justice system in general affect the decision of victims to engage in any form of post-assault behaviour, there are individual factors that may also influence this decision. The current study found that at a bivariate level, age of victim, household income, province and race were not significantly associated with whether a victim engaged in one or more post-assault behaviours. This finding is in stark contrast to several studies conducted in America and Australia that demonstrated the association between these

demographic and socioeconomic characteristics of victims and the likelihood that they will engage in any post-assault behaviour (Planty et al., 2013).

Furthermore, according to results obtained from the current study, the relationship to the perpetrator and location of the assault were more likely to be associated with whether a victim engaged in any post-assault behaviour or not. In 2006 Gutner et al. examined the coping strategies of victims and what influenced them in choosing specific coping strategies. Gutner et al. (2006) found that relationship to perpetrator was a significant predictor of a victims reactions post-assault. This result is in line with results from the current study that found relationship to perpetrator was 40% more likely to influence post-assault behaviour outcome. In another study conducted by Felson et al. (2005) it was also found that relationship to perpetrator predicted whether a victim would report the assault or not. Felson et al. (2005) found that victims of sexual assault were more likely to report the incident to police if it was from an intimate partner as opposed to an acquaintance assault. This is further supported by Planty et al. (2013) who found that the most common reason victims of sexual assault do not report a crime is fear of retaliation (20%) and if they thought the assault was a personal matter (13%). The location of the sexual assault was also a significant predictor of post-assault behaviour according to the current study. This result is supported by a study conducted by Blake et al (2014) conducted in Sao Paulo which indicated that most assaults occurred in the home of victims, open spaces as well as on the way from work or school.

The strength of the associations between the selected demographic and socioeconomic characteristics of victims was further tested at a multivariate level. The results indicate that the odds of age, race, main household income and relationship to perpetrator were not statistically significant in predicting which of the post assault behaviours victims may engage in. According to the multivariate analysis this result implies that there is little difference in which

category of the outcome variable victims may form part of. In essence the odds for race, age, main household income and relationship to perpetrator are the same.

The current study has found that province and location were significant predictors of whether victims would choose to engage in one or more post assault behaviour. As demonstrated in Table 9 these results indicate that selected demographic and socioeconomic characteristics have a lower odd of predicting whether victims engaged in post-assault behaviours compared to no behaviour. This finding is supported by a study conducted by Christofides et al. (2003) which examined the factors associated with why women may not report an offence as well as why they would not seek medical assistance. The study further found that due to the majority of sexual assaults being coercive in nature, victims are less likely to report the assault (Christofides et al., 2003). Additionally, these results at the multivariate level confirm the results obtained in the bivariate analysis: that there is an association between location and the likelihood that a victim will choose to either engage in post-assault services at their disposal.

In order to further understand victims' responses to a sexual assault it is important to further understand the role that barriers of sexual assault play. According to Table 5, victims are less likely to report or seek medical attention. This can be explained as a result of a victim's fear or retaliation, not being believed by the police, fear of being medically examined, fear of the legal process as well as the fear of experiencing rudeness and poor treatment by both the police and healthcare workers (Christofides et al., 2003). It has further been found that victims of sexual assault are concerned that if they report or seek medical assistance their reputations will be ruined as health workers and police do not respect confidentiality (Christofides et al., 2003; Naidoo, 2013).

Studies of post-assault behaviour thus far have examined perceptions, attitudes and reasons as to why victims may choose one- behaviour over the other. In essence, studies of post-assault

behaviour thus far have been qualitative in nature- exploring the reasons why victims choose to engage in certain post-assault behaviours. The current study has taken this a step further by examining the types and levels of post-assault behaviour as well as the potential associations between various demographic and socioeconomic characteristics of victims resulting in the uptake of certain post-assault behaviours.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion

The location of a sexual assault as well as the province in which a sexual assault occurs has been found to be significant factors associated with whether a victim will engage in three behaviours. This study has shown that there are four dominant forms of post-assault behaviours that victims of sexual assault commonly engage in: no-behaviour, reporting to the police, reporting to traditional leaders and seeking medical attention. Although the current study's sample is limited to sexually assaulted victims according to the Victims of Crime Survey, the importance of the findings has important implications for policy and legislature that specifically address the healthcare and well-being of victims. This study's findings also have implications for future research in terms of service delivery.

This study has addressed the issue of post-assault behaviour among sexually assaulted women in South Africa and has demonstrated the importance of these behaviours in evaluating and monitoring the health of sexually assaulted women. Furthermore, the current study has shown that in order to address the concern of women's health it is of utmost importance to understand the many reasons as to why women choose not to engage in any post-assault behaviour after an incident. International standards dictate that sexual violence to women is of concern as it represents a larger concern for population health and development in terms of healthcare services (WHO, 2012; Naidoo, 2013).

The study's main research question was to determine what post-assault behaviours victims of sexual assault engaged in. The behaviours identified by the current study using the VOCS 2011 and 2012, most common in South Africa were reporting to the police, reporting to traditional leaders/chiefs and seeking medical attention. The findings of the current research suggest that

government and non-governmental organizations need to do more in terms of creating an enabling environment for victims of sexual assault. This would assist in not only promoting victims to report and seek care after an assault, but it would also enable society, healthcare workers and police officials to be more sympathetic and informed with regards to the physical and mental health of women. The decision to engage in any of the behaviours or no behaviour at all was demonstrated to be dependent on societal perceptions, stereotypes, myths and stigmatization of sexual assault in South Africa. These are important contextual factors that cannot be isolated from sexually assaulted women especially when examining the post-assault behaviours they may or may not engage in.

South Africa has made great strides in terms of redressing the inequalities within the healthcare system created by apartheid, however, in terms of medical and legal aspects of sexual assault it has fallen behind when compared internationally (Naidoo, 2013). The current study has demonstrated this as well: 65% of women are estimated not to engage in any post-assault behaviour. The question the current study poses to both government and non-governmental agencies in South Africa is what additional steps can be taken to address the issue of non-reporting. South Africa has made progress in terms of promoting women and children's rights (16 days of activism), however, in terms of directly addressing sexual assault, little beyond equipping medical staff with the necessary guidelines on how to examine victims has been initiated (Christofides et al., 2003; Dewkes et al., 2003).

This study has also demonstrated the significance of using South Africa as a case study when examining sexual assault and post-assault behaviours. South Africa has had a unique transformation from an oppressive regime to a more liberal and democratic society. However, despite this change, crime is still of concern, particularly sexual assault as it remains the most under-represented and under-reported crime to date. Furthermore, although the current study

did not directly examine the marginalization, discrimination and stigmatization of women in general as well as sexually assaulted women, it is important to bear in mind that they are present not only in the population at large but in the criminal justice system as well as the healthcare profession. This study has demonstrated how the attitudes of these key actors affect the outcome of victims engaging in post-assault behaviour.

This study has also demonstrated the need to examine the demographic and socioeconomic characteristics of victims of sexual assault in order to understand the conditions under which a victim will choose to follow certain post-assault behaviours. This is proposed in the conceptual and theoretical framework that was adapted from Clark and Quadara (2010). The predicted probabilities (Table 9) have significant implications for the study of both sexual assault and post-assault behaviour. It must be noted that the low probabilities of victims engaging in more than two behaviours is concerning for two reasons: firstly, sexual assault rates in South Africa are high and secondly, little is known about what victims do after an assault. Therefore as the results have demonstrated there is a need to include the study of post-assault behaviours in frameworks that are aimed at better understanding the consequences of sexual assault.

This study has furthermore elaborated on possible policy implications that post-assault behaviours may have on population health at large. Any policy or legislature that is developed must address the issues of increasing post-assault behaviours among sexually assaulted women so as to better understand the situation of sexual assault as well as how best to improve the attitudes of the criminal justice system and the healthcare system.

6.2. Recommendations

The current study has found that most women who are sexually assaulted despite their risk to a multitude of health-related concerns, choose not to seek assistance, they do not engage in any post-assault behaviour. Although this finding is significant, there are areas of study that can be further investigated in order to provide a more detailed approach to the study of post-assault behaviours among sexually assaulted victims.

Firstly, the current study has provided a base for future studies to build from. The current study examined how many post-assault behaviours victims engage in. It is therefore recommended that future studies aim to identify the specific behaviour that sexually assaulted women engage in namely, of the three post-assault behaviours found in the current study, which of them are victims more likely to use. This is an important aspect that the current study did not address which will impact on how these services are improved upon.

Secondly, the current study has identified the avenues that prove as a disincentive in the uptake of specific post-assault behaviours among sexually assaulted women, namely, long-held stereotypes and myths regarding sexual assault that threaten to re-victimize victims. Currently the medical management package for victims of sexual assault aims to "reduce the physical and psychological consequences" of the assault through the treatment of injuries and clinical evaluation, pregnancy testing and emergency contraception, forensic examination as well as trauma counselling (Population Council, 2008). Cultural perceptions regarding abuse impact on whether women will seek assistance or not (Population Council, 2008).

As a result it is recommended that policy-makers re-evaluate current programmes aimed at encouraging women to report and seek medical attention after an assault. These programmes as it stands do not address the core problem of stigmatization as a result of commonly held

stereotypes and myths on the part of the criminal justice system as well as healthcare workers as well as tradition. Perception is an important aspect that cannot be separated from sexual assault as it inevitably influences the attitudes of the personnel involved in the process of reporting and seeking medical attention. In order for any policy that is aimed at encouraging disclosure and reporting of a sexual assault these attitudes must be changed. It is further recommended that a more rigorous training in basic counselling techniques be employed to address the issues of stereotypes, myth and discrimination of women who have been sexually assaulted to both healthcare workers and criminal justice officials.

Thirdly, once issues of perceptions and attitude are addressed, the roll-out and encouragement of post-assault behaviours among victims can be considered. There is a need to create demand for post-assault facilities that cater specifically to the needs of sexually assaulted victims. It is therefore recommended that healthcare policy-makers, government agencies (such as the Department of Health and Welfare) as well as non-governmental agencies reconsider demand creation activities and incentives aimed at encouraging sexually assaulted women to report (whether to the police or someone else) as well as seek medical attention. One possible avenue for demand creation activities is through providing information to victims on the possible long-term health benefits associated with engaging in any-form of post-assault behaviour. The aim should be to see in the long-term victims both reporting and seeking medical attention.

Fourthly, this study acknowledges the efforts that the South African government has made towards encouraging men not to abuse women and children. These efforts include "16-days of activism" and "Brothers for Life" campaigns that are aimed at creating awareness around domestic abuse and sexual assault. The "16-days of activism" campaign in South Africa aims to increase awareness around the incidence of violence against women; how the violence occurs in society as well as what the negative impacts are on women (16 Days of activism,

2008). The campaign also aims to raise funds for non-governmental organizations; faith based organizations as well as community based organizations that provide support to the victims of sexual violence (16 Days of activism, 2008). The "Brothers for Life" campaign focuses on changing the perception of men regarding sexual violence and gender-based violence in South Africa (Myers et al., 2012). The campaign aims to motivate men who are in abusive relationships to take steps for positive change through encouraging the use of gender-based violence services such as counselling (Myers et al., 2012).

However, these efforts cannot achieve the long-term goal of understanding the consequences of sexual assault and how women utilise post-assault care in the context of culture and tradition. The current study highlighted the issue of living in a patriarchal society where women are seen as inferior to men, however it is recommended that future studies' aimed at identifying post-assault behaviour examine the extent to which culture and tradition influence a woman's decision to engage in any post-assault behaviour.

Overall, the current study has joined in on the dialogue regarding sexual assault. The study has contributed to the body of research on sexual assault by examining the post-assault behaviours that victims engage in as well as identified what demographic characteristics may be associated with victims' decision to engage in one or more post-assault behaviours.

6.3. Limitations of the Study

6.3.1 Study design

The current study was a cross-sectional design. The concern with this has to do with being able to fully understand the possible effects of interventions on the study population over a period of time. Being able to track victims of sexual assault and observing how their behaviour, attitudes

and perceptions change over time would be a vital tool in evaluating whether programmatic and policy changes were effective in achieving the ultimate aim of encouraging reporting and seeking of medical attention by victims of sexual assault.

6.3.2 Study methodology

The current study made use of the Multinomial Logistic Regression for multivariate analysis. The Multinomial Logistic Regression Model has one limitation: it assumes that the outcome variable categories have no particular order. This is a limitation as it would be more beneficial to understand how each category of the selected predictors may or may not contribute to post-assault behaviour. Lastly, the study was not able to perform analysis on education and marital status of sexually assaulted women in relation to post-assault behaviour due to these variables being unavailable in the Victims of Crime Survey (VOCS).

6.3.3 Under-reporting

In general, due to the sensitive and traumatic nature of sexual assault, victims are less likely to report the incident (Lievore, 2003). Although it has been estimated that National Victims of Crime surveys produce higher reported rates of sexual assault, there are still women who do not report the assault. Women may not report because they are afraid of being re-victimised by police and healthcare workers. They may also not report due to fear of stigmatization by their community, family and friends

6.3.4 Limited studies on post-assault behaviour

The current study aimed to identify the levels and types of post-assault behaviours that sexually assaulted women engage in after an incident has occurred. However, discussions regarding the effect of various demographic and socio-economic characteristics on predicting a certain selection of post-assault behaviours among victims were limited due to the area of post-assault studies being severely limited.

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Appendices

Appendix A: Chi-square test of association of selected demographic and socioeconomic characteristics of victims by the outcome variable of post-assault behaviour

Variable Name	**Pearson- chi2**
Age	Df (21), 20.303
Race	Df (6), 2.87
Income	Df (3), 6.04
Province	Df (24), 70.38*
Location	Df (15), 179.90*
Relationship to perpetrator	Df (15), 195.69*

* significance at 5% level of significance