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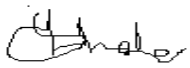
Signature of Student	
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THE COMMUNICATION AND DISSEMINATION OF INFORMATION ABOUT HIV/AIDS AWARENESS AND PREVENTION IN THE SOUTH AFRICAN MINING INDUSTRY, WITH REFERENCE TO KUMBA IRON ORE

M.IT DISSERTATION

Presented in partial fulfilment of the requirements for the degree of Master of Information Technology in the School of Information Technology; Faculty of Engineering, Built Environment and Information Technology, University of Pretoria

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CANDIDATE'S DECLARATION

I hereby declare that I have written this dissertation by myself and I have not used any other support besides those which are clearly indicated as such in this dissertation. The words or sentences that were obtained from books or other media are clearly indicated as citations and referenced to their original sources. I am fully aware of the anti-plagiarism rules of the University of Pretoria. I am also fully aware of the penalty in cases where those rules are dishonoured. For their great help with the English language and Tswana language, Ms Lisa Thompson and Mr Mooketsi Mocumi respectively are highly appreciated and acknowledged.

Signature_____ Date_____

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ABSTRACT

The intention of the study was to find the preferred medium of communication and the preferred language for the dissemination of Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) information among the unskilled employees of Kumba Iron Ore mining company, with an assumption that disseminating of appropriate information can influence positive behaviour change with respect to the HIV/AIDS disease. In this study company and clinic workshops came up as the most preferred media for receiving HIV/AIDS information and English came up as the most preferred language for all the media types except radio where Tswana-Sotho came up as the most preferred language. It also came up clearly in the findings that most women do not like to discuss HIV/AIDS issues with friends or relatives.

KUMBA IRON ORE BACKGROUND

Kumba Iron Ore is a major iron ore producer in South Africa and is a member of the Anglo American plc group. It is one of the leading suppliers of high quality iron ore to local and international steel industries. Kumba has three mines in South Africa: Sishen and Kolomela mine in the Northern Cape Province, and Thabazimbi mine in the Limpopo province. Kumba has a number of international customers which include China, Japan, Korea and other countries in Europe and the Middle East. Kumba has a port at Saldanha Bay in the Western Cape which is used to store the iron ore from Sishen and Kolomela mines before shipping it to different customers. The headquarters of the company is in Centurion, Pretoria. Kumba is listed on the Johannesburg Stock Exchange (Kumba.co.za, 2012).

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CHAPTER 1: PROPOSAL

1.1 INTRODUCTION

The aim of the study is to find a way of disseminating appropriate HIV/AIDS information to the unskilled employees of Kumba Iron Ore who are based at the operational sites. The focus areas are the two mines of Kumba Iron Ore in the Northern Cape (Sishen mine) and Limpopo (Thabazimbi mine) in South Africa.

1.2 RESEARCH QUESTION

The research question is: Which would be the preferred medium of communication and preferred language of HIV/AIDS information amongst the unskilled employees of Kumba Iron Ore Company?

1.3 SUB-QUESTIONS

The following will arise:

- What are their opinions about HIV/AIDS?
- What are their perceptions/misperceptions, attitudes and behaviour towards HIV/AIDS?
- Which are the preferred communication media?
- What is the preferred language?

In addressing these research sub-questions, the existing literature on communication and information dissemination will be studied in order to find the role of effective communication and dissemination in supporting HIV/AIDS awareness and prevention.

1.4 ASSUMPTIONS

The underlying assumption is that dissemination of appropriate information can influence positive behaviour change with respect to HIV/AIDS amongst the unskilled employees with reference to Kumba Iron Ore.

1.5 RESEARCH METHODOLOGY

The unskilled employees will be the subjects of the investigation. The sample will be all the unskilled employees who are classified as Adult Basic Education Training 1 (ABET1) according to the company classification; who work at the sites either permanently or on contract basis. The size of the population is 324 as of 22 September 2011. The method that will be used to collect data is a printed questionnaire because of the participants' limited internet access. The questionnaire will be answered by unskilled employees when they are starting work shifts or when attending compulsory work-related medical check-ups on mining-related illnesses such as those connected with dust and noise. The check-ups take place at company clinics every week from Monday to Friday.

1.6 LITERATURE STUDY

A literature study will be conducted so as to gather what other researchers have already established as preferred medium of communication and preferred language. This will also assist in gathering what other researchers have established regarding information behaviour, information needs, information seeking, information communication, and information dissemination. This will also assist in understanding more about HIV/AIDS in general. The literature study is important because it will help to collect background information on the topic and also help in the application of the survey findings.

1.7 SURVEY

Printed questionnaires will be used to gather information from the unskilled employees of two Kumba mining operations sites (Sishen and Thabazimbi). This will be done to determine their preferred medium of communication and preferred language for receiving HIV/AIDS information.

1.8 DEMARCATION OF THE FIELD OF STUDY

The study will be restricted to unskilled employees of Kumba's Sishen and Thabazimbi mines. The two mines have a large number of unskilled employees where a sample can be taken from. The size of the population is 324 as of 22 September 2011.

1.9 DIVISION OF CHAPTERS

CHAPTER 1 – INTRODUCTION

This chapter will cover an overview of the research problem, the research question, sub-questions, research methodology, and reference to the literature study, summary of chapters, clarification of terms (abbreviations and definitions) and the research schedule/timetable.

CHAPTER 2 – LITERATURE REVIEW

A literature review will be conducted in this chapter. Some of the aspects that will be addressed include definitions as found in the literature. The definition of information will be discussed in detail as well as information behaviour, information needs, information seeking, information communication, information dissemination, information use, HIV/AIDS perceptions, marriage customs in South Africa and the media.

CHAPTER 3 – METHODOLOGY

The research methodology will be investigated and discussed in this chapter. The Information Communication Technology (ICT) tools will be examined in detail. Ethical justifications will be looked into in this chapter. The type of surveys will also be discussed briefly. Appropriate survey methods to be used to gather and organise the HIV/AIDS information will be discussed too. Questionnaires will be sent out to the responsible Kumba Iron Ore management team, University of Pretoria Department of Information Science and the University of Pretoria Research Committee for approval. The questionnaire will be distributed to the target group and the returned questionnaires will be analysed.

CHAPTER 4 – DATA COLLECTION AND FINDINGS

The findings of the survey will be presented in this chapter and will be compared to results reached in similar investigations reported in the literature if there are any.

CHAPTER 5 – RECOMMENDATION AND CONCLUSION

Recommendations, based on the results of the analysis and findings, will be made. The findings will also be summarised and evaluated against the original problem statement. All used references will be listed at the end of the research.

1.10 CLARIFICATION OF ACRONYMS AND KEY TERMS

1. AIDS - Acquired Immune Deficiency Syndrome. Acquired means an individual can catch the virus; Immune Deficiency means that, in the body's system that fights against diseases, there is a weakness and the body is now prone to opportunistic diseases; Syndrome refers to a group of health problems that make up a disease.
2. ABET1 – This is a Kumba Iron Ore partisan grading system for all employees without recognised mining qualifications and they are graded as follows: A4–A8, P4–P8, T4–T8 and J4–J8.
3. Unskilled employees – Kumba Iron Ore unskilled employees are defined as employees who are graded under the ABET1 grading system. Kumba Iron Ore goes on to define unskilled employees as those workers who don't have recognised mining qualifications.
4. Communication – According to Steinberg (2007), communication is defined as a technical view and as a meaning-centred view focusing on how accurately and efficiently messages can be transferred from one person to another using technical means (gadgets) and non-technical means (oral) taking into consideration what motivates people to communicate in the first place.
5. Information dissemination – This is a systematic way of giving out relevant information to the target group and it has to be convenient to both the distributor and receiver.
6. CD4 – Cluster of Differentiation 4 is a glycoprotein mostly found on the surface of helper T cells in the human body. The helper T cells belong to the body's defence system and these cells are vital for the body's immune system (Parker, 2011). The helper T cells consist of a cluster of differentiation 4 (CD4) molecules on their surface making it easy for the HIV to attach onto the helper T cells.
7. ART – Anti-retroviral treatment is the main type of HIV or AIDS treatment. This treatment is not a cure for HIV or AIDS but it helps people with AIDS to live longer. This type of treatment consists of a combination of drugs that a person with AIDS has

to take every day for the rest of that person's life. The main purpose of antiretroviral treatment is to keep the amount of HIV in the human body at a low level.

8. ARV – Anti-retroviral drugs are drugs given to patients with HIV-infections in order for the patients not to get attacked by HIV opportunistic diseases such as Tuberculosis.

1.11 RESEARCH SCHEDULE/TIMETABLE

- Selection of topic and preliminary review: November 2010
- Final research proposal: December 2010
- Literature review: January 2011–April 2011
- Methods and data: May 2011–March 2012
- Final draft: 24 April 2012
- Editing: 25 April 2011–15 May 2012
- Final submission: 21 May 2012

1.12 CHAPTER SUMMARY

This chapter constitutes the study proposal. The research question and sub-questions were formulated. The research methodology was established and this methodology will assist in answering the research question. The research chapters were summarised and all acronyms used were explained in detail.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter examines the literature. Several literature articles will assist in informing the research. Topics relevant to the study are introduced and discussed. Various themes relating to information communication and dissemination are investigated. Literature on topics such as information, information behaviour, information needs, information seeking, information communication, information dissemination, information use, HIV/AIDS perceptions, and marriage customs in South Africa and communication media types is reviewed. This will assist in finding out more on HIV/AIDS treatment, support, prevention, monitoring and observation with regard to unskilled workers at Kumba Iron Ore mining sites of Sishen and Thabazimbi. The literature will be further interrogated by questions such as:

- What is information?
- What is information behaviour and what prompts it?
- What are information needs?
- What is information seeking?
- What is information communication?
- What is information dissemination?
- What triggers information use?
- What are HIV/AIDS perceptions?
- What are the roles of effective communication media in supporting HIV awareness and prevention efforts?

2.2 KUMBA IRON ORE – PEOPLE AND VALUES

Kumba Iron Ore invests in its employees by creating a safe and healthy working environment and by investing in its employees' skills and capabilities. Kumba Iron Ore also ensures fair and ethical working practices for all employees (Kumba.co.za, 2012). According to Kumba.co.za (2012), Kumba Iron Ore employees are bound by the company's corporate values of:

- Safety
- Care and respect

- Integrity
- Accountability
- Collaboration
- Innovation

Kumba Iron Ore is committed to maintain the highest standards of safety and responsibility across all its business units and to ensure a sustainable development of the villages which surround its operations. Kumba Iron Ore has set a zero harm mindset for its safety strategy which is also driven by the motto: “one death is too many”. This means Kumba Iron Ore does its best to avoid the loss of life at its operational sites. Kumba meets its safety standards by having a strong corporate governance, and documented policies, procedures and standards that are either legislated or which are self-imposed (Kumba.co.za, 2012).

2.3 INFORMATION

Information is foundational for a person to make informed decisions. Informed decisions are made possible by accessing relevant information in an understandable format and appropriate language (Cool & Belkin, 2002:16). Information is a basic tool for any person’s growth (Cool & Belkin, 2002:16).

There are various definitions of information. According to Bateson (1972:453), “information is a difference that makes a difference”. Parker (1974:10) defines information as “the pattern of organisation of matter and energy” whereas Machlup and Mansfield (1983:4) defined information as “not just one thing; it means different things to those who explain its characteristics, properties, elements, techniques, functions, dimensions and connections”. Buckland (1991:3) described information under three categories: “information-as-process (the ability to inform), information-as-knowledge (the knowledge imparted in the process of being informed) and information-as-thing”. Saracevic (1999:1057) went on to say “information is a basic phenomenon: [as with] all basic phenomena such as energy or gravity in physics, life in biology, justice in jurisprudence”. The researcher went on to define information as “something we don’t know”. Heeks (1999:3) defines information as “something which you did not know and reduces uncertainty”. Ingwersen and Järvelin (2005) define information as “something which, when perceived, affects and transforms the recipient’s state of knowledge”.

Steinberg (2007) defined three important information flow lineages. Table 2.1 summarises the information flow lineages.

Table 2.1 The information flow lineages, source Steinberg (2007)

Genetic	Encoded information transmitted through biological inheritance
Neural-Cultural	Embodied, that is experienced, passed on and expressed information
Exosomatic	This is embedded and recorded information

Belkin (1978:59) stated that more and more people were changing their behaviour with regard to reading information pertaining to their field of study or field of interest. Eaton and Bawden (1991) said “the behaviour of people of wanting to read more influenced them to store information safely for later use”. Eaton and Bawden (1991) describe an information life cycle which is summarised in Figure 2.1.

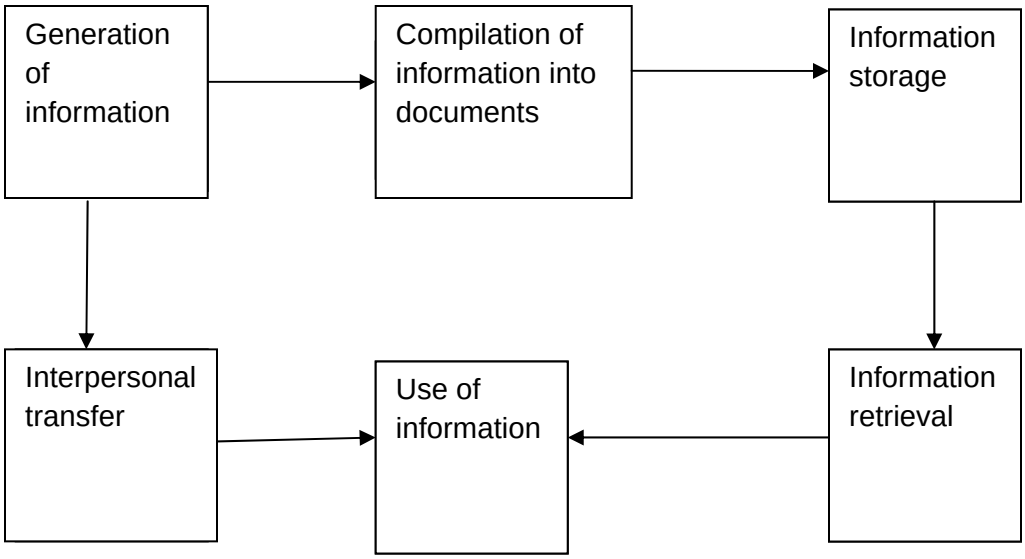

Figure 2.1 Information life cycle, adapted from Eaton & Bawden (1991:156-165)

Eaton and Bawden (1991) linked the information life cycle to information behaviour by saying that “when people go through the information life cycle it defines the way they seek and use information”.

2.3.1 INFORMATION BEHAVIOUR

According to Ellis (1984), information behaviour is "the general things people do to find information including information seeking, information searching and information retrieval as well as the communication and use of information". Wilson (1999) defined information behaviour as "the totality of human behaviour in relation to sources and channels of information, including both active and passive information seeking and information use". Information behaviour encompasses lack of awareness of the need for that information, avoidance of appropriate information, as well as active information seeking by using appropriate media and appropriate language (Wilson, 1999). Many researchers have consensus that information seeking and information retrieval are seen as subsets of information behaviour (Wilson, 1999:253). Such behaviour is based on various kinds of information needs.

2.3.2 INFORMATION NEEDS

People use information to satisfy their needs. They rely on information to make decisions in their daily lives. They might be simple or complicated tasks such as work-related issues, attending a sports event or doing household errands; they still need enough information to accomplish those tasks or to solve those problems (Rouse & Rouse, 1984:133). The need for information is often associated with uncertainty (Heeks, 1999). Rouse and Rouse (1984) state that the value attached to the problem is important in decision making thereby sometimes forcing people to look for more information when they realise that they do not have enough information to handle that particular problem. According to Wilson (2002), "the need for information is often associated with anxiety".

There are various definitions of information needs. Dervin (1999) defines it as "a desire to find information to fill a gap in your knowledge to satisfy a goal or to fill the gap to solve a problem such as making a decision on buying a new thing, making plans to visit a new place or proposing a new product". Dervin (1999) goes on to define information needs as "the desire to make sense of a situation such as how to complete a given task, how to deal with a break-up or how to diagnose a life-threatening disease".
Information needs also arise when people find out that they lack information to make a decision or solve a problem. They may acknowledge the gap in their knowledge state and seek for more information to find a solution (Belkin, Oddy & Brooks, 1982). Belkin

(1980) refers to such a gap as Anomalous State of Knowledge (ASK). It is sometimes also referred to as Incomplete State of Knowledge (ISK) (Staiman & Mizzaro, 1998). The ideas of ASK and ISK feature strongly in the cognitive models in Information seeking. According to Staiman and Mizzaro (1998), “It is often difficult for people to express their information needs”. This can be explained further in the categorisation of information needs suggested by Taylor (1968). According to Taylor (1968), people can move from the visceral need to the formalised need by asking appropriate questions. The structure of the actual question mostly determines the answer one gets. Table 2.2 summarises the classes of information needs.

Table 2.2 Categorisation of information needs, source Taylor (1968)

Visceral need	The person is aware or unaware of the need for information. There is an unclear feeling that something is missing. This also includes the unexpressed need for information.
Conscious need	The person is aware of the need for information and can describe it, often in an ambiguous or confusing statement
Formalised need	The person can express a rational statement of the information needed but could have doubts as to whether the statement is quite clear. Mostly it will lead to repetition.
Compromised need	The person reformulates the question in anticipation of what is expected by the information giver. It is a compromise between how the person asks and how the need is met or how the answer is given.

Since people need information for various reasons; when the need arises they may start to seek for it. There are various ways of seeking information.

2.3.3 INFORMATION SEEKING

Whenever people become aware of their information needs they start to react to the need and start to find information which will lead to information seeking (Wilson, 2002:708). Information seeking is a mostly referred as a conscious or intentional effort by an individual to find information. Sometimes it is necessary to use an intermediary to facilitate information seeking for inexperienced users of libraries and information systems so that they may get the required information (Wilson, 1999:250).

Information seeking can sometimes be very simple and straightforward, especially when using a single information resource, or it can be very complex, mostly to beginners,

when using a range of information resources (for example, books, databases, portals, search engines and the library catalogue) (Wilson, 1999). Wilson (1999:266) stated that information seeking is made up of the following:

- Deciding what information to search for
- Deciding where to search for the wanted information (the choice of information resources)
- Deciding which methods to use to search for the wanted information (information searching).

Information seeking can, however, also refer to the use of books (such as browsing through the index of a book) or asking people for information and advice. Wilson designed an onion model for information seeking which is summarised in Figure 2.2.

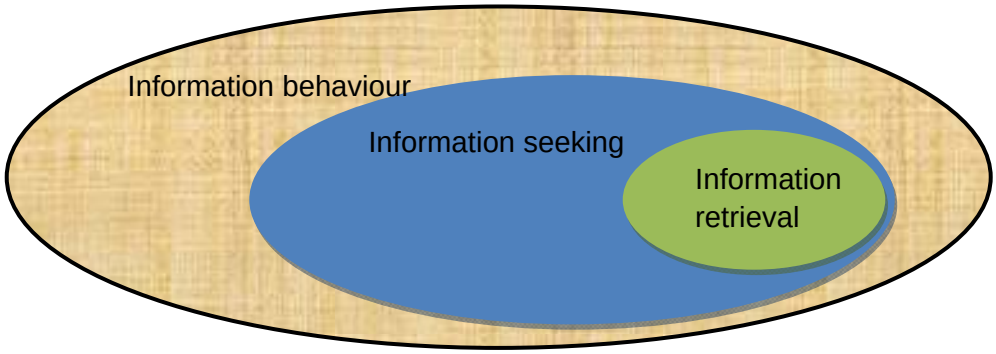

Figure 2.2 The Onion Model of information seeking, adapted from Wilson (1999:249)

Information seeking depends on information behaviour and also influence information retrieval and communication.

2.3.4 INFORMATION COMMUNICATION

Communication does not have a universally accepted definition and there are many ways of approaching it (Steinberg, 2007:39). As stated by Steinberg (2007:40), communication is defined as “a transactional process of exchanging messages and negotiating meaning to establish and maintain relationships”. Kreitner and Kinicki (2008) defined communication as “interpersonal exchange of information and having the ability to effectively use associated body language and behaviour in any given context so as to understand the conveyed message”.

Steinberg (2007:39) went on to explain different dimensions of communication. Communication has several dimensions such as verbal, nonverbal, oral, formal,

informal, intentional, and unintentional. Table 2.3 gives a summary of communication dimensions.

Table 2.3 Communication dimensions, source Steinberg (2007:42)

Verbal	Spoken/written words belonging to a similar language. Using similar languages to communicate assigns similar meanings to words making it easier to understand each other
Nonverbal	Images that people present through personal appearance. It caters for messages sent through body movements, gestures, tone of voice, use of time and space
Oral	Words which are transmitted aloud and there must be a lot of talking and listening
Formal	It uses both verbal and nonverbal messages. The aim is to create a desired impression
Informal	This caters for well structured messages and the environment is more relaxed and the people communicate in a natural way
Intentional	Communicating with a specific goal in mind. Sending the message across. It is mostly accompanied by a nonverbal sign
Unintentional	Communicating a message without being aware of it mostly in a loud voice. Mostly it is used when a person is angry and it is accompanied by a nonverbal sign.

There are various ways an individual can send a message and if the message reaches the intended recipient it may enrich that individual.

2.3.5 INFORMATION DISSEMINATION

Ellis (1984) defines information dissemination as “the gathering, investigation and transmission of useful information to a particular subject matter”. According to Cool and Belkin (2002), information dissemination refers to “methods one uses to communicate information or make facts known”.) Britz and Ackermann (2006) say Information dissemination is a “process of distributing the wanted information in a manner in which the language used will not be a barrier to the intended receiver”. Dissemination of information is one-way. The disseminated information flows down from the source to the target audience or selected group; there may or may not be any feedback from the audience or selected group depending on the source (Ellis, 1984).

Efficiency of information dissemination to the selected audience or target group can be improved in different ways such as establishing strong networks within the audience, but also taking into account its culture and environment, then using word of mouth or the

internet (Guèye, 2009). Information dissemination is directly linked to information use; that is, an individual's desire to use information contributes to information dissemination efficiency (Ellis, 1984).

2.3.6 INFORMATION USE

Information use comes into play when an individual applies the gathered information in a real life situation. There is a big challenge in selecting useful information for use. Guèye (2009) stated that "these days, people are exposed to far more information than they can practically absorb or apply". There are so many sources of information; an individual should apply the three questions put forward by Wilson (1999) to get desired information. The questions are as follows:

- What is the overall message of this information?
- Is this information something I'm likely to ever use?
- Are there any quick tips in this information that I can apply right now?

If a person can answer the three questions, it can assist in getting the required information. There is also a need to organise one's information. According to Wilson (1999) there are 4 four steps one can use to accomplish this:

- Prioritise the information to be used
- Find the correct source to use
- Use research to find information you need the most
- Take small steps by applying small pieces of useful information when you can

Information received at the right time and in the right format may help people to achieve their goals.

2.4 HIV/AIDS

AIDS - Acquired Immune Deficiency Syndrome: Acquired means an individual can catch the virus; Immune Deficiency means that, in the body's system that fights against diseases, there is a weakness and the body is now prone to opportunistic diseases; Syndrome refers to a group of health problems that make up a disease.

The AIDS.org website (2010) stated that some South African people are not certain what AIDS is and what causes it. The AIDS.org website says that "AIDS is caused by a virus

called HI". When an individual is infected with HIV, the body of that individual tries to fight-off the virus, thereby producing "antibodies", special molecules, to try to fight the HI virus (AIDS.org, 2010). When a tester is testing a person's blood for HIV, the tester will be searching for antibodies in the blood. If the antibodies are found in the blood, it means that person is infected with HIV. People who have the HIV antibodies in their blood are called "HIV-positive" individuals (Parker, 2011).

2.4.1 HIV/AIDS INFORMATION

While putting forward information on HIV/AIDS, Parker (2011) explains that "HIV has a lifecycle; as the virus infects the body it favours particular cells of the body's defence system". The cells which the HIV attacks when it gets into a person's blood stream are called helper T cells which are vital for the body's immune system (Parker, 2011). The helper T cells consist of a cluster of differentiation 4 (CD4) molecules on their surface making it easy for the HIV to attach onto the helper T cells. The genetic information transfer takes place when the HIV attaches itself to the CD4 molecules resulting in the viral membrane fusing with the helper T cell's membrane (Parker, 2011). The researcher went on to say "The helper T cell consists of a hard shell of glycoprotein and proteins on the outside and genetic information in the inside". The virus uses the helper T cell's resources to replicate, showing that the HIV is smaller than the helper T cell (Parker, 2011).

According to AIDS.org (2010), "HIV belongs to a special group of viruses called retroviruses, meaning the virus needs cells from the host in order to make more copies of itself (replication)". The genetic information of the HIV is not programmed as Deoxyribonucleic Acid (DNA) but as Ribonucleic Acid (RNA) and thereby reverses DNA recordings in the body (AIDS.org, 2010). Furthermore, the host cell is used by the virus to produce the attacking tools. Parker (2011) again stated that, "the DNA of the host cell becomes clear after being attacked by the virus and can then be easily transferred to the nucleus". The foreign piece of DNA is inserted randomly into the host DNA and is ready to be copied after the insertion. This process takes only half a day after infection (Parker, 2011).

AIDS.org (2010) also reveals that when AIDS starts in a person's body, the foreign viral DNA is quickly replicated and produces RNA molecules but the reason why it replicates like that is not yet known to any scientists. The result is the death of cells in the body. When the new virus particles are released in the blood, the helper T cell weakens and eventually dies too. This triggers the beginning of the weakening of the immune system. The HIV cycle continues until the immune system is totally destroyed if medication is not taken by the infected person (Parker, 2011). According to TheBody.com (2011), "The lifespan of the HI Virus is about 20 minutes maximum, in a drop of blood that lands on a surface outside the body. Once that droplet dries the virus is dead".

2.4.2 HIV/AIDS IN SOUTH AFRICA

HIV/AIDS exists in South Africa and the country has witnessed an increase in HIV infections and HIV/AIDS related deaths during the past years (Treatment Action Campaign, 2010). The UNAIDS report (2008) indicates that "approximately 5,700,000 South Africans had HIV/AIDS, or approximately 12% of South Africa's population of 48 million were infected with HIV/AIDS by then".

In 2007, only 28% of people in South Africa with advanced HIV/AIDS were receiving anti-retroviral treatment (ART). In 2004, 2005 and 2006 the figures were 4%, 15% and 21% respectively (UNAIDS Report, 2008). In 2009, almost 1 million of the population or approximately 2% of all South Africans living with HIV/AIDS were receiving anti-retrovirals (ARVs), of which 38% were children (Treatment Action Campaign, 2010).

According to StatsSA (2010), in 2010 approximately 280 000 South Africans died of HIV/AIDS. StatsSA (2010) also indicates that from 2003 to 2010, between 42% and 47% of all deaths among South Africans were HIV/AIDS related deaths. Despite a high infection rate among mature age groups in South Africa, new infections among teenagers seem to be declining (StatsSA, 2010). This is supported by HIV/AIDS prevalence figures in the 15–19 year age group for 2005, 2006 and 2007 which were 16%, 14% and 13% respectively (StatsSA, 2010).

2.4.3 STUDIED ARTICLES ON HIV/AIDS

In research conducted by Tan, Pan, Zhou, Wang and Xie (2007), they concluded that appropriate information communication, information availability and information accuracy

may assist in fighting the HIV/AIDS pandemic. The HIV/AIDS pandemic is viewed from several angles, the most noticeable being the medical, religious, cultural and society views. HIV/AIDS information dissemination has many stakeholders, ranging from health-care workers to society in general (Lambert, Normand & Volkow, 2010).

Accessing accurate HIV/AIDS information may assist people to fight the disease and to assist in making decisions about their health issues (Lambert, Normand & Volkow, 2010). There are a lot of perceptions about HIV/AIDS in South Africa (Macheke & Campbell, 1998:148). If correct information is given and received well, it can assist in correcting inaccurate perceptions regarding HIV/AIDS (Macheke & Campbell, 1998:148). In the findings of the study carried out in Tanzanian urban and rural areas by Bastien, Leshabari and Klepp (2010), it was found that good communication can be a good weapon to fight against HIV/AIDS disease in Tanzanian youths. The researchers looked at the Tanzanian youths' exposure to HIV/AIDS information, the frequency of communication, awareness of HIV/AIDS, the HIV/AIDS stigma, the risk perception and HIV/AIDS knowledge so as to find a proper way of communicating and disseminating the appropriate information of HIV/AIDS prevention and awareness to that group. The authors also noted that the use of nonverbal communication methods which are culturally acceptable, such as music and drama may also improve rural youths' access to information and better understanding of the disease.

Theron (2010:237) also supported communication of correct information to HIV/AIDS affected and infected people for them to live longer and to minimise mother-to-child transmission (MTCT) of HIV. Lindau, Leitsch, Lundberg and Jerome (2006) researched older women's attitudes, behaviour and communication about sex and HIV. According to the researchers, communication has to be to all ages. The researchers also found that open discussion was lacking among the elderly women. Wilson and Kaplan (2000) researched communication between patients and doctors. The researchers found that if there is more communication between the two, a relationship can be established which will lead to trust. The patient will be open about his/her health issues whereby the doctor will give the right support and medication.

According to Alder (2010) there must be different ways of controlling and preventing the spread of HIV/AIDS. The researcher looked at different HIV/AIDS information education programmes which can assist people to change their behaviour, perceptions and attitude towards HIV/AIDS. The author went on to encourage the use of educational

programmes which are interactive and participatory so that even illiterate people can feel accommodated and wanted since written information is unsuitable for them. The education programmes must be insightful, accurate and current to encourage the people to continue participating.

Marshall and Wood (2010) noted that well-structured educational programmes inform the people in societies. The programmes must be communicated and disseminated using correct and acceptable channels for the intended people so as to:

- Convey basic knowledge about HIV/AIDS disease and its prevention
- Build a working community which accepts people living with HIV/AIDS to avoid feelings of rejection and isolation by giving the society the correct facts about the disease
- Provide information to the people about voluntary counselling, testing and available medication within their community
- Inform people about protection measures for anyone potentially exposed to HIV in their daily activities.

The Treatment Action Campaign (2010) outlined the HIV/AIDS impact on the society which includes:

- Economic losses
- Workforce and general human losses in the country
- High medical expenses
- Stigmatisation in society
- High breakdown of family structures
- Increase in orphans because there is still a high new infection rate among adults in South Africa (StatsSA, 2010).

According to Schackman (2010), “the environments and the most commonly used media within a society inform that society’s beliefs and perceptions”. Hogan and Palmer (2004), in their research, indicate that people living with HIV/AIDS consider people as the most trustworthy source of information and their preferred source of information.

2.4.4 HIV/AIDS INFORMATION COMMUNICATION

Structured information communication may assist some people in knowing the difference between being HIV-positive and having AIDS and that there is life after being diagnosed HIV positive (Alder, 2010). According to Hoboyi and Geffen (2005), “many people are HIV-positive but they don't get sick for many years”. These researchers went on to say that “as HIV develops, it slowly wears down the immune system and viruses, parasites, fungi and bacteria (opportunistic infections) can make the person very sick when the immune system is compromised by the HIV virus”.

Effective communication of HIV/AIDS information may prevent depression or even death which might be caused by lack of understanding of the disease (Taylor, 2007). Taylor (2007), went on to say that “an informed worker, with the appropriate knowledge and in a good mindset, performs his or her work better than an uninformed worker”.

2.4.5 HIV/AIDS PERCEPTIONS

Lyttleton (1996) noted that “perceptions of HIV/AIDS are mostly influenced by media representations, especially of its physical appearance, and also influenced by a community’s beliefs”. The researcher went on to say that “several pictures display AIDS in negative ways, with pictures of pale thin people with ulcers and thrush in their mouth and horrible skin rashes covered with discharge”. Such images associate HIV/AIDS with dirt and death (Lyttleton, 1996).

Some people, especially in rural South Africa, regard HIV/AIDS as a dirty disease, as a disease for the young and for the poor people (Marshall and Wood, 2010). Other people in South Africa think that sleeping with a virgin can cure HIV/AIDS (Marshall and Wood, 2010). According to Macheke and Campbell (1998), these perceptions are mostly influenced by:

- Lack of information and knowledge about HIV/AIDS
- Incorrect information that is disseminated to the people by the available sources
- Attitude and denial about the disease
- Lack of role models to lead by example
- Cultural barriers, values and beliefs with regard to acceptable norms and behaviours within a society

- Government's policies and the Government's lack of understanding of the social and cultural complexities of its people.

Disseminating correct information to society may assist people to know and understand HIV/AIDS issues better (Treatment Action Campaign, 2009).

2.4.6 FORMER PRESIDENT THABO MBEKI's HIV/AIDS PERCEPTIONS

According to Singer (2008), the former president of South Africa, Thabo Mbeki, was not eager to formulate a government policy to support the use of ARVs to HIV/AIDS infected people because he believed that anti-retrovirals were toxic. Singer (2008) wrote that "Thabo Mbeki rejected the scientific consensus that AIDS is caused by a virus and anti-retroviral drugs can save the lives of people who test positive for it". Mbeki believed that HIV/AIDS was a conspiracy by the West to reduce the black population (Singer, 2008). The former president believed the advice of Manto Tshabalala-Msimang (the late former Minister of Health) which stated that AIDS could be cured by regular eating of garlic, amadumbe (tubers), African potato, lemon juice, olive oil and beetroot (McGreal, 2007). McGreal (2007), further contends that "being at that highest level of Government leadership, it is also necessary to assess a body of scientific evidence before communicating your personal opinion to the public". Singer (2008) observes, "The more responsibility we hold, and the more tragic the consequences of making the wrong decision are likely to be".

McGreal (2007) reveals that the former president, when interviewed in 2007 on how he felt about HIV/AIDS, replied that he still believed in his earlier sentiments. When asked "why he allowed AIDS to absorb him" the former president said: "It's the way it was presented! You see, the presentation of the matter, which is actually quite wrong, is that the major killer disease on the African continent is HIV/AIDS; this is really going to decimate the African population! So your biggest threat is not unemployment or racism or globalisation, your biggest threat which will really destroy South Africa is HIV/AIDS!"

2.4.7 IMPLICATIONS OF FORMER PRESIDENT THABO MBEKI'S DECISION

According to Wines (2007), 800 people who were infected with HIV/AIDS were dying per day and more than 1,000 were being infected by HIV on a daily basis by that time. According to Cullinan (2007), the then Health Minister, Dr Manto Tshabalala-Msimang, still denied that ARVs work and she even went on to refer to them as poisonous drugs. Dr Manto Tshabalala-Msimang kept on emphasising the use of the African diet instead of ARVs to fight the HIV/AIDS disease (Wines, 2007). Some people misinterpreted the African diet idea which was referred to by many as the "African nutrition idea", and they started ignoring their daily medication (ARVs) which resulted in many deaths (Cullinan, 2007).

Cullinan (2007) contends that the South African HIV strategy was rewritten in 2006 by Ms Madlala-Routledge (the former Deputy Minister of Health). The new strategy which was formulated in 2006 urged public officials to do AIDS tests so that they could influence the South African people to do the same (Cullinan, 2007). Mbeki took too long to implement anti-retroviral treatment in public clinics and hospitals to slow down HIV/AIDS in infected people's bodies; by then most people were solemnly eating what the Minister of Health recommended and it led to many deaths (Wines, 2007).

2.4.8 POST MBEKI AND HIV/AIDS – ZUMA'S REGIME

As has been indicated, Singer (2008) has shown that the former president, Thabo Mbeki, was not very supportive of the use of ARVs. Smith (2009) has also shown, however, that when Jacob Zuma became president in 2009, he spoke openly about the HIV/AIDS disease. He encouraged HIV/AIDS testing and the use of ARVs to boost the immune system of people with HIV/AIDS. He introduced an expansion of ARV treatment in the country including treatment for HIV-positive babies under the age of one year (Smith, 2009).

After President Jacob Zuma declared an expansion of HIV/AIDS treatment to all people with HIV/AIDS, a huge difference was noted between him and his predecessor whose reluctance to act on HIV/AIDS in the country led to premature deaths (Smith, 2009). On 1st December 2009, President Zuma indicated a determination to help the infected, the

affected and the babies born with HIV, as he affirmed on his first HIV/AIDS Day address to the nation. Jacob Zuma said, “Let there be no more shame, no more blame, no more discrimination and no more stigma, and let the politicisation and endless debates about HIV and AIDS stop" (Smith, 2009). Zuma encouraged pregnant women and patients with both tuberculosis and AIDS to receive treatment if their CD4 count was less than 350, unlike the previous model under Thabo Mbeki, where patients were starting to receive ARVs when their CD4 count was less than 200 (Smith, 2009).

During Jacob Zuma’s rape trial in 2006 after he slept with an HIV positive woman, he was quoted by newspapers saying he took a shower to minimise the risk of contracting HIV/AIDS from the woman (Wines, 2006:A1). During the trial the prosecutor asked President Zuma to tell the court about his HIV/AIDS knowledge. The prosecutor wanted him to explain to the court what he knew about the disease and why he chose to sleep with someone he knew was HIV positive (Skeen, 2007). According to Skeen (2007), “Zuma said he had headed a government initiative on AIDS and that he had a relatively high level of knowledge about the disease. He had knowledge that the chances of males contracting the disease are very slim, because of their body mechanisms”. Most people regarded it as a reckless utterance from a man who held a very high post in South African society and being considered by many as their role model (Skeen, 2007).

According to Tisha (2006), “Zuma’s statement of taking a shower soon after sleeping with the woman and his reluctance to worry about the risk of contracting HIV, undermined positive AIDS prevention messages to the nation whose political leadership was so reluctant to focus on the country’s HIV/AIDS crisis”. Zuma, being a leader in the society, made it very difficult for health workers and care givers to fight the disease in South Africa where some ordinary people might have believed in taking a shower after sex (Tisha, 2006).

2.5 MARRIAGE CUSTOMS IN SOUTH AFRICA

Customs come about when the traditions of a society are repeated and become the regular practice of the people. Passed on from generation to generation, customs could be considered as one of the basic characteristics of a culture. Customs can take any form, such as village traditional dances and celebrations, sports festivals, types of food eaten, dress code or marriage procedures to be practised. South Africa is a nation with

diverse cultures, languages and religious beliefs which are mostly influenced by the different ethnic groups. There are mainly two types of marriages in South Africa namely customary and civil marriage.

2.5.1 CUSTOMARY MARRIAGE

According to Ndashe and Johnstone (2007), “a customary marriage is one according to the traditional customs and culture of South Africa’s indigenous people”. Customary marriage is recognised in South Africa by the Recognition of the Customary Marriages Act of 1998 and it is protected by South African law. The Customary Marriages Act was implemented on 15 November 2000 (Ndashe & Johnstone, 2007:13).

Ndashe and Johnstone (2007) further stated that “Monogamous customary marriages (there are only two parties to a marriage – husband and wife) are automatically in community of property unless the parties do a contract stating otherwise”. In South Africa married in community of property means that there is only one joint estate for the two people in the marriage. This means that everything that a husband and wife own, including their debts before they got married is combined into one joint estate. This is the most common type of marriage and is automatically applied by the law unless the parties do a contract to change it (Ndashe & Johnstone, 2007).

If a man wants to marry other wives when he is already married in a monogamous customary marriage he must apply to the courts with a written contract stating how the property will be regulated amongst the wives. The court can order an immediate division of the property of the first marriage before allowing the man to have the second marriage and so forth (Ndashe & Johnstone, 2007:14). The researchers went on to say “There are three conditions for a customary marriage to be legally valid. First, both the people getting married must be over 18. Second, they must both agree to be married under customary law. Third, their marriage must be celebrated according to the prevailing customary law of their community”.

2.5.2 CIVIL MARRIAGE

According to Ndashe and Johnstone (2007) "A civil marriage is a marriage that is entered into in terms of the Marriage Act; formalities of this type of marriage are regulated by the Marriage Act, no.25 of 1961 and apply with regard to all civil marriages concluded in the Republic of South Africa".

Civil marriages are often conducted at churches, the Department of Home Affairs and any other place of choice where the marriage will be blessed by a church minister (Ndashe & Johnstone, 2007:6). There are different types of civil marriages: marriage in community of property; marriage out of community of property; and marriage out of community of property with accrual (Ndashe & Johnstone, 2007:15). According to Ndashe and Johnstone (2007), "The two people who are getting married must consent to entering the marriage and should both be 18 years of age; if they are under 18 years of age they need to have the permission of their parents or guardians. If their parents or guardians refuse consent they can apply to the High Court for consent".

2.5.3 RELATIONSHIPS AMONG THE INDIGENOUS PEOPLE OF SOUTH AFRICA

According to SAinfo (2011), the South African indigenous population is made up of three broad groupings:

- The Nguni – comprising the Zulu, Xhosa, Tsonga, Ndebele, and Swazi people.
- The Sotho-Tswana – comprising the Southern, Northern and Western Sotho-Tswana people.
- The Venda people.

The Nguni and Venda people practise and follow almost the same marriage traditions and the Sotho-Tswana people also practise and follow similar marriage traditions (PlatAfrica, 2009). Below are some of South African marriage customs.

2.5.4 TSWANA MARRIAGES

The Tswana people are part of the Sotho-Tswana indigenous group. The Sotho-Tswana group consists of the Southern (Pedi), Northern (Sotho) and Western (Tswana) people. Various traditions are associated with Sotho-Tswana people's marriages (Herskovits,

1923). The Tswana people have a tradition whereby parents have influence over their children's marriage arrangements (Herskovlts, 1923). According to Matthews (1940), "the views of the maternal relatives of the child, especially those of his mother's brother (malume), must be taken into account, as no procedure can be taken in the affairs of his sisters' children without due consultation with their malume". Marriage consultation must be done with all other close relatives. Any relative such as a father's brother or uncle has a superior say in that customary marriage outcome.

The consent of the parents is essential in the Tswana marriage customs. The two cannot marry against their parents' wishes and if the bride and the groom decide to marry without their parents' consent, the marriage is not recognised (Matthews, 1940). The author went on to say that "whatever the age and status of the people marrying, they don't have much say since the preliminary negotiations to that marriage are conducted by representatives or agents whose principals are not for the prospective bride and groom but for their parents".

The bride and the groom only notify their marriage intentions to their parents so that the parents can start getting involved and establish the bride price (lobola). In Tswana custom a man can have many wives (Matthews, 1940). The first wife's children are given preference in matters of succession to the status of their father's name and the inheritance of their father's wealth over the other wives' children (Matthews, 1940). If a man marries a woman and does not follow the traditional procedure, the marriage is not recognised by the family and it is regarded as "staying together" (live in) (PlatAfrica, 2009). Tswana people don't encourage their children to get married far away from their traditional homes because they believe in continuous interaction and the constant giving of advice to them, despite urbanisation (PlatAfrica, 2009). When the children are staying in the city, they have to frequently visit home to remain in touch with the family (PlatAfrica, 2009).

2.5.5 ZULU MARRIAGES

The Zulu people are part of the Nguni indigenous group. The Nguni group consists of the Zulu, Xhosa, Tsonga, Ndebele, and Swazi peoples. Zulu people regard marriage as a great achievement for a woman. In a Zulu culture a woman who is not married or who is

divorced doesn't get the same respect from the society as a married woman. Zulu people regard marriage as customary if there is an agreement between the parents of the bride and the groom and if there is a promise from the groom's family to pay the bride price (lobola). No marriage takes place without at least an agreement as to when the lobola will be paid. If the parents of the groom fail to meet the parents of the bride to agree on the lobola, the couple, even if they have a civil marriage, will still be regarded as not married and referred to as live-in couples (Dlamini, 1983).

Beckwith & Fisher (2000) indicated that "bride price among African indigenous people in general and Zulus in particular, despite socio-economic and religious changes, is inspired among others by the very conviction that it is a unique African institution, and is therefore regarded as a sacred heritage from the African past that serves the purpose of identifying even an educated African sister with her tribal brother". Lobola is to some extent compensation to the parents for the loss of their daughter (Beckwith & Fisher, 2000). Beckwith and Fisher (2000) state that "Zulu men can marry as many wives as they want but the husband must consult his first wife before bringing the new wife into the family". All the other wives must consult the first wife for any changes or contributions to the family. If the husband is working in town and all the wives stay in the village, the first wife is the one who distributes what the husband brings home to the other wives. If the husband is staying with another woman in town and she has not yet been introduced and accepted by the other wives and family it is regarded as "live-in" and is not customarily binding (Afolayan, 2004).

2.6 THE MEDIA

Webster and Trevino (1995) state that "recent media choice research has focused on attempts to determine what theory best explains people's choices of communication media". The researchers went on to say that "two policy-capturing studies support the notion that media richness and social influence theories are complementary rather than competing and that the relative importance of choice factors depends on the medium".
Rice (1992) noted that "people spent time communicating mostly using the verbal and face-to-face medium". New innovation in technology has contributed to other types of communication media choices. These days people have a variety of communication media choices such as faxes, teleconferencing, web-based live-meetings, tele-presence,

electronic mail (e-mail), voice mail systems, voice over internet protocol (phone service over the internet) on top of the traditional media such as the telephone, billboards, radios, memos, TV, letters, and traditional gathering meetings (Rice, 1992). Media choice is mostly influenced by media richness and media availability (Fulk, 1993). Internetworldstats.com (2011) has shown that South Africa has a strong mobile market and mobile usage. South Africa has a market penetration exceeding 70% and cell-phone number portability was introduced in 2006 thereby making it easy for users to move from one network provider to the other (Internetworldstats.com, 2011). The network providers are all using mobile Internet and multimedia services via 3G mobile technologies which increase the number of people accessing the internet.
According to Internetworldstats.com (2011), Internet users in South Africa have increased significantly since the year 2000. Table 2.4 shows the number of internet users from 2000–2005, 2008–2009 and 2011.

Table 2.4 Internet users, adapted from http://www.internetworldstats.com/stats1.htm#africa

YEAR	Users	Population	Internet Penetration.
2000	2,400,000	43,690,000	5.5 %
2001	2,750,000	44,409,700	6.2 %
2002	3,100,000	45,129,400	6.8 %
2003	3,283,000	45,919,200	7.1 %
2004	3,523,000	47,556,900	7.3%
2005	3,600,000	48,661,805	7.4 %
2008	4,590,000	48,986,115	10.5 %
2009	5,300,000	49,052,489	10.8 %
2011	6,800,000	49,894,031	13.9 %

2.6.1 MEDIA RICHNESS

Suh (1999) says, “Communication media differ in the richness of the information being processed”. Media richness is determined by the media’s effectiveness to give feedback

on the subject matter, the type of communication being used, the use of language of choice or the flexibility of the media to accommodate language variety, and the media's ability to give a personal focus on each individual (Suh, 1999:296). If all the different communication characteristics can be applied in a medium, such as effective feedback, language variety and personal focus, the medium is regarded as rich because it can satisfy its recipient (Fulk, Steinfield, Schmitz & Power, 1987).

McGrath, Hollingshead and O'Connor (1993) have indicated that "Face-to-face is considered the richest medium, because it allows rapid mutual feedback, permits the simultaneous communication of multiple signals such as body language, facial expression and tone of voice, uses high-variety natural language and conveys emotion". The authors went on to say that telephone, television and radio follow face-to-face communication in media richness and furthermore, that "rich media enable people to interpret and reach agreement about un-analysable, difficult and complex issues, while lean media are appropriate for communicating about routine activities" (McGrath, Hollingshead & O'Connor, 1993). Figure 2.3 summarises media richness.

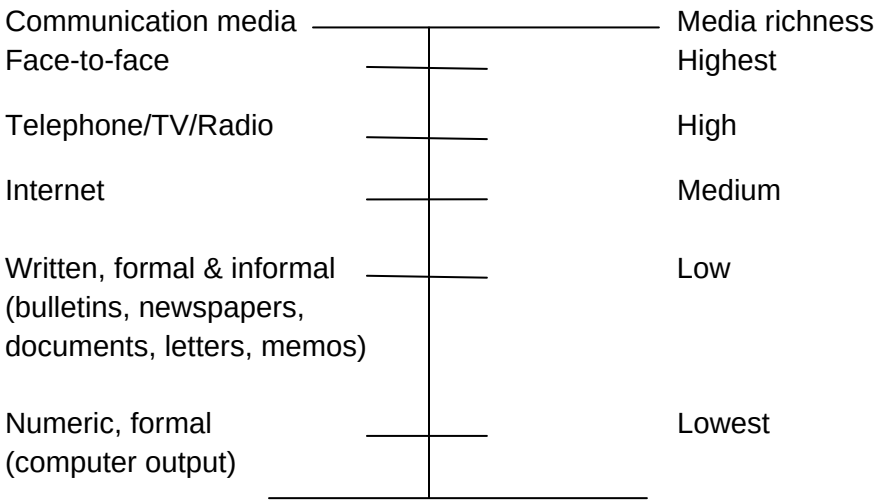

Figure 2.3 Communication media and media richness, adapted from Suh (1999: 295-312)

According to Internetworldstats.com (2011), face-to-face is still considered the richest medium followed by internet/cell phone media (for example, facebook, twitter, Google talk, BlackBerry Messenger, Windows Live Messenger, Chat). Figure 2.4 summarises the South African current media richness trend.

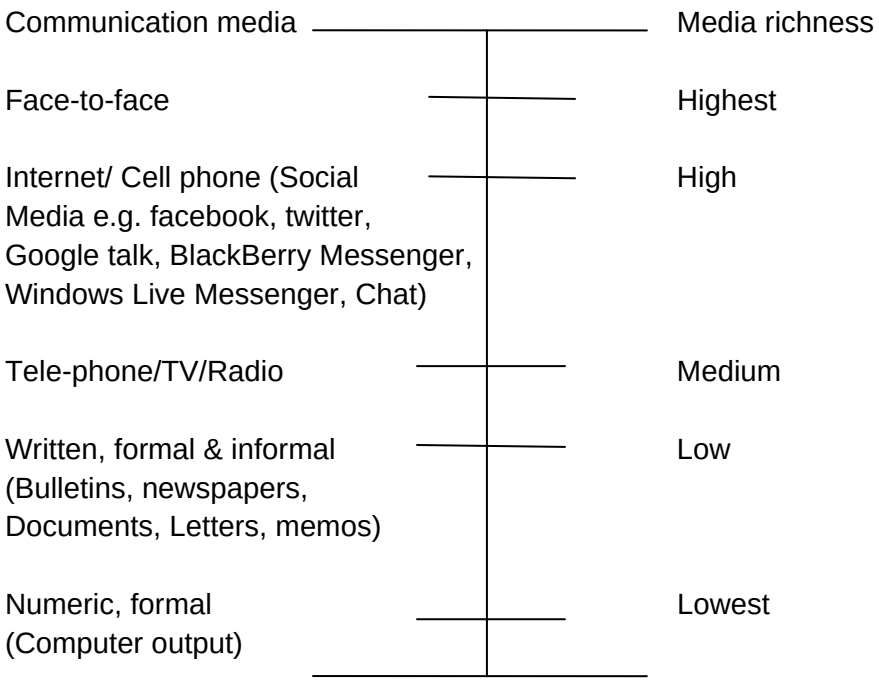

Figure 2.4 Testing media richness theory to explain consumers' intentions, source Brunelle (2010)

2.6.2 THE TASK AND MEDIA FIT ON INFORMATION RICHNESS

McGrath, Hollingshead and O'Connor (1993) stated, "A relationship between a communication medium and task performance appears to be more dependent on experience with the medium and with group membership than on the type of task on which the group would be working". The researchers presented media characteristics, the type of tasks and the effect of the media fit on performance in a 4 X 4 matrix form. Table 2.5 summarises the task and media fit on information richness.

According to the researchers, "the matrix classifies patterns of differential fit between the information richness requirements of the tasks assigned and the information richness capability of the communication media". The best fits are near the main diagonal of a matrix. Task/media combinations northeast of the matrix proved to be poor, because the media might be too rich for the task and cause the communication disruption. Task/media combinations southwest of the diagonal also proved to be poor because the media might be too lean for the task and not able to transmit enough information.

Table 2.5 The task and media fit on information richness, adapted from McGrath, Hollingshead and O'Connor (1993:307)

Increasing potential richness required for task success ↓	Communication media Increasing potential richness of information →			
Task type (s)	Computer/Cell text systems	Audio Systems	Video systems	Face-to-face communication
Generating ideas & plans	Good fit	Marginal fit information too rich	Poor fit information too rich	Poor fit information too rich
Choosing correct answer: intellective tasks	Marginal fit medium too constrained	Good fit	Good fit	Poor fit information too rich
Choosing preferred answer: judgement tasks	Poor fit medium too constrained	Good fit	Good fit	Marginal fit information too rich
Negotiating conflicts of interest	Poor fit medium to constrained	Poor fit medium too constrained	Marginal fit information too lean	Good fit

2.6.3 FACTORS INFLUENCING MEDIA CHOICES, ATTITUDES AND USE

According to Galbraith (1977), “there are certain objective factors that relate to characteristics of communication incidents and jobs that constrain or guide people’s behaviour”. There are two types of objective factors, the ambiguity (equivocality) of the message and the contextual constraints (Weick, 1979). Weick (1979) defined ambiguity as “existence of multiple and conflicting interpretations”. The processing of information assists in reducing uncertainty and ambiguity; uncertainty may arise due to lack of information and ambiguity may arise due to the use of the wrong communication channel and language (Tushman & Nadler, 1978). There is a general assumption that the more information a person gets the more uncertainty is reduced (Daft & Lengel, 1986).

Daft and Weick (1984) assert that “under ambiguity, communicators understand and interpret existing information differently”. There must be an effective communication channel and an establishment of a common meaning of words to avoid different interpretations of words or sentences (Daft & Weick, 1984).

Based on Daft and Lengel (1986), “the shared meaning of words can be more easily created when the medium used for the communication is appropriate and rich; it has the capacity to convey multiple verbal and nonverbal cues, allows for immediate feedback, uses natural language, and has personal focus”. Messages that are low on ambiguity do not require rich media (Daft & Weick, 1984). Leaner media such as letters or memos can adequately carry the message (Schmitz & Fulk, 1991).

Webster and Trevino (1995) found out that “media choices, attitudes and use are associated with a combination of factors drawn from multiple theoretical perspectives”. There are objective factors which represent characteristics of communication situations, social factors representing perceptions of communication environments and person or technology factors representing individuals' experience with newer media (Steinfield & Fulk, 1986).

2.6.4 CURRENT MEDIA IN SOUTH AFRICA

Shepherd (2011) says that “media choices in South Africa are mostly influenced by the social, political and economic issues”. The people’s attitudes, values and beliefs also contribute to the media preferences in a society (Berger, 2007). According to Sekgoela (2009), “People’s mobility, social structures and differences, financial literacy, perceptions of social delivery and unions, digital and mobile capabilities, mindsets and brand consciousness are also major contributors to the people’s media preferences”.
There is a need to understand the type of people you want to disseminate the appropriate information to (Berger, 2007). A media tool which is very effective in a political environment might be very ineffective in an economic environment (Berger, 2007). It is important to use the right media so that the conveyed message can enrich the audiences by increasing their awareness, altering their negative perceptions, informing them of stories and empowering the audiences with adequate knowledge about the subject matter (John, 2008).

2.6.5 MEDIA PREFERENCES OF SOUTH AFRICANS

There is now a huge use of video conferencing and Skype calls as opposed to face-to-face meetings whenever possible in big companies in South Africa.

Berger (2009a) pointed out that radio is South Africa's most accessible medium throughout the country, reaching 94% of the population by 2008 and 96% by 2009. He went on to say that South African Broadcasting Corporation (SABC) was the leading broadcaster in the radio sector in the country at that time and that the SABC's African language stations are the most accessed mass media in the country (Berger, 2009a). According to Berger (2009a), "the SABC's five national and 13 regional radio stations cover the spectrum of South African languages, and are broadcast on an analogue free-to-air basis". Further, "around nine million homes receive analogue television and SABC 1 and 2 are above 90% coverage whereas SABC 3's penetration is less than 34%". According to the South African Advertising Research Foundation (SAARF) (2010), "free-to-air television e.tv penetration has grown steadily to 84% of the population, while newspapers reach under half of the population, with the Daily Sun newspaper having the highest penetration. Subscription television reaches just under 10% of the population".

According to the SAARF (2010), about 8% of the population had access to the Internet by 2009 and according to internetworldstats.com (2011), 13.9 % of South Africans have access to the Internet, however, this figure may underestimate the numbers given that millions of cell-phone users access the Mxit chat platform (and Facebook) without realising they are interfacing with the Internet" (Berger, 2009b). SAARF (2010) went on to say, "14% of the population in the highest income bracket (using the SAARF's Living Standards Measure, 9-10) account for almost two-thirds of those with Internet access, while 22% of the population, which falls into Living Standards Measure 1-2, records a 0% penetration. 48% of the population falls into Living Standards Measure 4-6, with just over a tenth of usage".

Cell phone penetration is growing rapidly with 89% of South Africans having access to cell phones (SAARF, 2010). The growth is mainly attributed to affordability and accessibility. It is easier to buy a cell phone in South Africa than renting a fixed landline. Most cell phone users prefer "pay as you go" lines to avoid phone bills on month-end. Again the process followed for someone to get a landline is complex and needs paper proof such as payslips (internetworldstats.com, 2011). Most South African people are taking advantage of data-enabled handsets to access the internet (SAARF, 2010).

Billboards are very popular in urban areas where most adverts are shown on static or electronic billboards (Berger, 2009). Anglo American Kumba Iron Ore uses pamphlets, as well as company workshops to provide information to its employees.

2.7 CHAPTER SUMMARY

Many sources were studied to determine what constitutes good communication and how to disseminate appropriate information to different people. Several definitions of information by different authors were discussed. In this chapter it was established that information behaviour influences information needs and information needs influence information seeking. HIV/AIDS characteristics were also explained in detail and several articles about HIV/AIDS in South Africa and abroad were studied in order to determine if there are any similarities in HIV/AIDS opinions and perceptions in different countries. Marriage customs in South African were also scrutinised in order to find out if marriage customs have any influence on the HIV/AIDS pandemic in South Africa. Several articles on media were studied. It was established that media richness has an influence on people's media choice. There are also several factors influencing media choice and media use in South Africa and abroad.

CHAPTER 3: METHODOLOGY

3.1 INTRODUCTION

This chapter will be used to examine data collection methods in order to find an appropriate way of gathering the information. The unskilled Kumba Iron Ore employees (as defined by the company as all those employees classified as ABET1) will be the subjects of the investigation. The most appropriate methods will be used to gather the required data. Information communication technology (ICT) as an information communication tool will also be analysed in this chapter. This information will assist in obtaining the participants's attitude, perceptions and behaviour regarding HIV/AIDS.

3.2 ICT AS INFORMATION COMMUNICATION TOOL

There are a number of ICT tools for information communication such as cell phones, satellite television, electronic mail, radio and Internet. These are tools that enable certain content such as text, audio, images, videos and so forth to be conveyed to the intended recipient (Warschauer, 2002). The content refers to the actual information which uses ICT tools to access or communicate the message (Warschauer, 2002). The participants of this study have limited access to Internet and also to some ICT tools such as the company portal, electronic mails and the company social media. Meaningful use of ICT tools requires appropriate content, language, community and institutional structures to be in place (Warschauer, 2002). Most of the target group members in this study use cell phones.

Preparedness of participants contributes to determining the appropriate communication channel and the success of the ICT tool to be used. In this study it is necessary to ask the participants their preferred media of communication. According to Adams and Fitch (2006), "ICT projects always have recurring problems around the world, which too often focus on providing hardware and software and pay no attention to the human and social systems that must also change for technology to make a difference".

3.3 ETHICAL CONSIDERATIONS

Resnik (1986) indicates that “ethics refers to norms for conduct that distinguish between acceptable and unacceptable behaviour or a method, procedure, or perspective for deciding how to act and analyse complex problems and issues”. Barry (1998) defined ethics as “a set of moral principles suggested by either an indi**v**idual or a group of people which are then widely accepted. These moral principles become a set of rules which set expectations for behaviour about the best conduct towards participants, employers, sponsors, researchers, lecturers and students”.

According to Resnik (1986), “most people learn ethical norms at home, at school, in church, or in other social settings”. Furthermore, he says that “although people obtain their institutional senses during childhood, ethical development takes place throughout life and people go through different stages of growth as they mature”. Life experience and background make interpretation of the ethical norms differ from person to person (Resnik, 1986).

Every institution or organisation follows a certain set of norms or standards so as to achieve its goals. Norms are followed mostly so as to have a tolerable behaviour that suits the institution’s aims and goals. The tolerable behaviour helps members of the institution to easily coordinate all members’ actions or activities to attain set goals (Barry, 1998:1084-85). In terms of the code of research ethics of the University of Pretoria, for the purpose of this study, the ethical guidelines to be followed are set out in Sections 3.4 to 3.10

3.4 VOLUNTARY INFORMED CONSENT

Voluntary informed consent means that the human subjects of research may agree or refuse to participate in the survey being conducted (Agulanna, 2010). The researcher must give complete information concerning the nature and purpose of research to the participants. Even if the company or institution allows the researcher to carry on with the survey, participants must still be given the option to choose (Agulanna, 2010). Participants have the right to be informed about the aim of the investigation and why

their participation is necessary. Again they must know how the gathered information will be used and how the results will be accessed (Agulanna, 2010).

3.5 CONFIDENTIALITY, PRIVACY AND ANONYMITY

The researcher must recognise participants' entitlement to privacy and must accord them their rights (Resnik, 1986). Participants' data must be treated with confidentiality and anonymity (Resnik, 1986). Confidentiality and anonymity will be ensured in accordance with the requirements of the Code of Research ethics of the University of Pretoria. A study permission letter will be written to Kumba Iron Ore's Human Resources (HR) to request permission to carry on with the questionnaire. Permission must be granted by Kumba Iron Ore management team, University of Pretoria's Department of Information Science and the University of Pretoria's Research Committee. A letter will accompany the questionnaire to all participants. The letter will clarify the purpose of the study and will also reassure the participants that their responses will remain anonymous and that they may withdraw their participation any time they wish to do so.

3.6 GENDER

According to Tannen (1990), "some people, due to religious and cultural practices, don't recognise women as having equal rights as men while some, due to democracy and educational advancement, recognise the rights of women as equal to men; this differentiates the way they communicate". Due to linguistic diversity and differing lifestyles between men and women, it is necessary to find the gender of participants. This will assist in finding an appropriate way of disseminating HIV/AIDS information to them. It will also assist in finding if there is a significant difference between women and men in the way in which they prefer to receive their HIV/AIDS information. Anderson and Leaper (1998) suggest that "men prefer summarised information compared to women who want to know all the, who, how, when, what, why and where issues".

3.7 LANGUAGE

In South Africa there are 11 official languages. The choice of appropriate language to communicate HIV/AIDS information to the respondents will be determined from the survey findings. Thabazimbi mine is situated in Limpopo province with Tswana language

being dominant but they might want to receive the information in another language other than Tswana and again there are some miners who speak different languages too. Sishen mine is situated in the Northern Province with mostly Tswana and Afrikaans being the dominant languages but the people might want to receive the HIV/AIDS information in a language of their choice. There is a need of finding out the appropriate language to use in communicating with the respondents.

3.8 MARITAL STATUS

The respondents' dwellings are situated in or near villages. The employees freely interact with the villagers and some even stay in the villages and commute to work. The findings will assist in finding appropriate ways to disseminate appropriate HIV/AIDS information to the people. It is necessary to find out if couples prefer to get HIV/AIDS information using the same communication channel or language. This will also assist in determining who prefers to know more about HIV/AIDS. The participants are not forced to reveal their marital status. It is also necessary to find out if there is a significant difference regarding HIV/AIDS knowledge among single, married, divorced, separated and widowed respondents.

3.9 MINING SITE

The two mines are situated in two different provinces, Limpopo and Northern Cape. The people have different beliefs. Identifying the mining site will assist in disseminating the appropriate information using the preferred channel and it will assist in analysing the collected data.

3.10 TYPE OF DWELLINGS AT KUMBA IRON ORE MINES

Kumba promotes home ownership through affordable housing and company loans to all National Union of Mining of South Africa (NUMSA) employees. Kumba's housing strategy is to avoid dependency and promote home ownership. Its sustainable development principles, as well as the mining charter requirements, work hand in hand to encourage employees to own houses. All employees at the mines qualify for a housing allowance to assist them to buy or rent their own accommodation. In 2009,

Kumba Iron Ore took a decision based on individual home ownership to upgrade all hostel accommodation to single bachelor flats and the project is still in progress.

Preferences for company housing units that become available are given to buyers. Sishen mine has a family housing project which was launched in 2006. There are 290 family house units which have been built to date. The company donated land for the project, provided guarantee to secure development funds and contributed extra money to the development of bulk and internal services.

3.11 SURVEY

According to Coomber (1997), “a survey is a data collection tool used to gather information about things”. Coomber (1997) went on to say that “surveys are commonly used in research to collect data from study participants; the survey may focus on factual information about things or it might aim to collect information about the participants’ opinion”. Scheuren (2004) defines a survey as “a method of gathering information from a sample of individuals; the sample is usually just a fraction of the population being studied”. The researcher went on to say that “surveys have a wide variety of purposes, they can be conducted in many ways including over the telephone, by mail, or in person and surveys have certain characteristics in common”. Survey classification can be done using many methods such as size or sample types. Surveys can be used to study humans, animals or objects (Scheuren, 2004). Some survey characteristics as described by Coomber (1997) are listed below:

- A portion of the population is used to gather the required information and mathematical methods are used to apply the results to the whole population.
- A structured survey uses scientific methods to select the sample to be used and each person or object has the same chance of being selected. This makes it easier to reliably project the sample results to the whole population.
- The gathering of data or information is done by standardised procedures and processes so that the questions asked will be uniform to all participants. The intention is to get a composite profile of the population.
- The individual participants must remain completely anonymous and data has to be summarised using statistical methods.

Coomber (1997) goes on to say, “A survey can be managed in different ways and each method has its own merits and demerits”. The main aim of applying a particular survey

method is to determine the current situation or status so that an improvement can be made or to maintain the current status if it is better than the anticipated one. The assessment also helps to find out associated risks which are frequently ignored when doing surveys (Coomber, 1997).

3.11.1 SURVEY TYPES

There are different types of surveys but this study will use the KABP (Knowledge, Attitude, Behaviour and Perception) survey. The KABP survey is one of the methods used to survey individuals. Survey standards should be consistent (Smith & Leigh, 1997).

3.11.2 KABP SURVEY

According to John (1988), the knowledge, attitude, behaviour and perceptions surveys are useful tools used to "tap into the feelings and perceptions of people, which will impact on their behaviour. They also tap into knowledge that already exists that may be a challenge or may need to be supplemented for a given situation". KABP is based on the assumption that a person's knowledge influences their attitude, which in turn influences their behaviour (Scheuren, 2004). It usually involves written, standardised questionnaires that are composed of yes and no answers (Scheuren, 2004).

The KABP survey is an interactive survey, where the target group signs a consent form to participate in the survey (Scheuren, 2004). The method establishes a level of knowledge, attitude, behaviour and perceptions in the sample about the subject and this can assist in finding better ways of encouraging positive behaviour, attitude and perception changes. This also assists in finding ways of disseminating relevant information to the target group (Scheuren, 2004).

3.11.3 ADVANTAGES OF KABP SURVEY

Chetley (2002) observes that KABP surveys help the researcher to find out information about the target group's knowledge, especially regarding what they already know and what they want to know. De Negri and Thomas (2003) explain that KABP uses three main methods of gathering information. These are the focus group technique, document analysis approach/observation technique and the questionnaires or interviews. The

questionnaires or interviews may be disseminated online or manually (De Negri & Thomas, 2003).

This study will use the questionnaires only and they will be disseminated manually.

Bertrand and Solis (2000) describe advantages of KABP such as the following:

- Provides the researcher with an insight into a small or large group/audience in a short period of time.
- Provides a quick picture of how the situation/condition was before the recommended programmes and after applying the programmes to determine success or failure.
- KABP data has statistical significance because interviewees are mostly randomly selected, and the data can be used as a baseline against which to measure findings at the end of the project.
- KABP can be easily used at any given time and in any environment.

3.11.4 DISADVANTAGES OF KABP SURVEY

KABP survey has a number of advantages but Bertrand and Solis (2000) also point out a number of disadvantages such as the following:

- Since human behaviour is not stagnant and mostly does not follow a logical progression it makes it very difficult for researchers to measure and draw conclusions in a short period of time.
- Knowing a particular issue or matter doesn't always result in a positive change of attitude and behaviour, it might even create more problems if the knowledge is applied wrongly.
- Community values can override individual interests making it difficult for individuals to accept and apply the knowledge gained from a programme.
- It is sometimes too tedious to complete the KABP questionnaire because sometimes collective or institutional changes must be made before individuals can be targeted effectively.
- People might provide false information on questionnaires, particularly if they've been asked about sensitive or sexual matters, leading to the use of incorrect data.
- People can distort what other people think or do.

- Using closed, predetermined, inflexible questions can mean you miss out on vital information since people will not be given the chance to write out more about the subject matter.
- People are generally suspicious of surveys and end up giving incorrect information or refrain from participating.
- The target audience might be experiencing so-called 'questionnaire fatigue' and will not be interested in doing the survey at all.

3.12 QUALITATIVE RESEARCH ANALYSIS

According to Mertens (1998), “there are different types of qualitative research methods such as participant and non-participant observations, documents analysis, content analysis (written and visual), discourse analysis and informal, structured or unstructured interviews”. Qualitative research methods have related characteristics. These related characteristics aim to establish the present state of a situation. To be able to establish the current state of a situation, the researcher has to take into account people’s perceptions, their past experiences, their beliefs and how they are currently living their lives. When a researcher understands the people being dealt with, the data being gathered from the respondents can assist in establishing their beliefs, their usual activities and their feelings about the subject matter. The respondents can give this information verbally or in writing (Mertens, 1998).

Mishler (1986) has stated that “when people make sense out of their experiences, they start to create their own reality”, and also observes that “people can share those experiences and realities among themselves or in their neighbourhood making it difficult for an outsider to change them”. Research design steps in qualitative research are not linear (Mertens, 1998). In other words a researcher can come up with an initial plan, but it can change on the way, as more data is collected. Mertens (1998) went on to say “the researcher must always go forwards and backwards between steps and research issues since they influence each other and the researcher must be flexible”. According to Sandelowski (1998), there are two general ways of conducting qualitative research:

- The researcher must not develop a hypothesis; the data must do the explanation and all theories must be created from collected data.
- The researcher must develop a preliminary intangible hypothesis, and gather evidence to support or refute the hypothesis (more positivist approach).

3.13 CONTENT ANALYSIS

Holsti (1963), states that content analysis is “any technique for making inferences by objectively and systematically identifying specified characteristics of messages”. Content analysis can be applied to examine any occurrence of recorded communication or written opinions (Holsti, 1969). This research method can be used in marketing, literature and cultural studies and in gender and age issues (Holsti, 1969). Holsti (1969) states that “there is a close relationship between content analysis and psycholinguistics, and content analysis plays an important role in the development of artificial intelligence in psycholinguistics issues”. Holsti (1969) established the use of content analysis as follows:

- To reveal international differences in communication content
- To identify the intentions, focus or communication trends of an individual, group or institution
- To describe attitudinal and behavioural responses to communications
- To determine psychological or emotional state of persons or groups

Holsti (1969) went on to group content analysis use into three basic categories:

- Make inferences about the experiences of a communication
- Describe and make inferences about characteristics of a communication
- Make inferences about the effects of a communication.

Content analysis uses are summarised in Table 3.1.

Table 3.1 Uses of content analysis by purpose, communication element, and question, adapted from Holsti (1969).

Purpose	Element	Question	Use
Make inferences about the antecedents of communications	Source	Who?	• Answer questions of disputed authorship (authorship analysis)
	Encoding process	Why?	• Analyse traits of individuals • Infer cultural aspects & change • Provide legal & evaluative evidence
Describe & make inferences about the characteristics of communications	Channel	How?	• Analyse techniques of persuasion • Analyse style
	Message	What?	• Describe trends in communication content • Relate known characteristics of sources to messages they produce • Compare communication content to standards
	Recipient	To whom?	• Relate known characteristics of audiences to messages produced for them • Describe patterns of communication
Make inferences about the consequences of communications	Decoding process	With what effect?	• Measure readability • Analyse the flow of information • Assess responses to communications

3.14 ANECDOTAL EVIDENCE FROM THE QUESTIONNAIRE FINDINGS

During the questionnaire analysis, the researcher found that some respondents wrote comments on the questionnaire despite the fact that there was no space for comments. The comments were an eye-opener and very important since they revealed the HIV/AIDS knowledge status and beliefs of some of the respondents. The researcher opted to include the comments as part of the findings since they will assist in formulating information documents to be disseminated to Kumba Iron Ore employees. This anecdotal evidence from respondents was analysed using content analysis.

3.15 QUESTIONNAIRE

Taylor-Powell (1998) defined a questionnaire as “a set of questions for gathering information from individuals; the questionnaires can be administered by mail, telephone, using face-to-face interviews, as handouts or electronically via e-mail or through Web-

based questionnaires". The questionnaire can be very short or very long and it is always recommended to advise the participants how long it will take to complete the questionnaire (Taylor-Powell, 1998).

For the purpose of this study a questionnaire will be used to gather information on the workers' general knowledge, attitude, behaviour and perceptions regarding HIV/AIDS. The sample will be taken from the unskilled employees who work at the sites either permanently or on contract basis. The size of the population is about 324 employees as of 22 September 2011.

The questionnaire will be divided into three sections:

- Background information of participants
- Participants' opinions and perceptions regarding transmission of HIV/AIDS
- Information dissemination preferences (media and language)

The information will be used to find gaps which exist in the communicating and disseminating HIV/AIDS of information and to find appropriate ways of doing so in order to reduce these gaps.

3.15.1 QUESTIONS

The method that will be used to collect data is a printed questionnaire because the participants have limited internet access. The questionnaire will be answered by unskilled Kumba Iron Ore employees who will be starting their shift. When Kumba shift employees start work, they always hold a "meeting" in order to get a summary of how the previous shift group performed and if there are any problems in the pit. They don't hold similar meetings after the shift. The questionnaire will also be answered by unskilled employees who will be attending a compulsory work-related medical check-up on mining-related illnesses such as those connected with dust and noise. The check-ups take place at company clinics every week from Monday to Friday.

The participants will fill in the questionnaires alone to ensure anonymity. The employees will be asked to select the option/options which best describe their opinion or perception. Data supplied by participants is going to be used for HIV/AIDS prevention and treatment

information purposes only. In order to prepare for the data collection, the following steps will be taken:

- Prepare the questions for the questionnaire
- Translate questions from English to the Tswana language, one of the dominant languages at the two mines.
- Send the questionnaires via e-mail to Safety, Health, Environment and Quality (SHEQ) managers on site for distribution.
- Visit the site after two weeks to monitor progress and thank those that have completed the questionnaire.
- Capture data.
- Make recommendations.

3.16 CHAPTER SUMMARY

A detailed research methodology was formulated and discussed. Ethical considerations such as confidentiality, privacy and anonymity were also discussed. A survey was defined and a KABP survey method was selected as the appropriate method to gather the data from the target group. Qualitative research analysis was defined and it was noted that there are different types of qualitative research methods such as document analysis and content analysis. Content analysis was defined and was used to analyse the anecdotal evidence from the respondents. The questionnaire was formulated and approved by Kumba Iron Ore management team, University of Pretoria Department of Information Science and the University of Pretoria Research Committee. The approved questionnaire was sent to the mines where the target group resides.

CHAPTER 4: DATA COLLECTION AND FINDINGS

4.1 INTRODUCTION

This chapter will be used to examine the data collected from the two mines (Sishen and Thabazimbi). The unskilled employees at the two mines were the subjects of investigation. The sample included all the unskilled employees who work at the sites either permanently or on contract basis. The size of the population was 324 as of 22 September 2011. The questionnaire was divided into three sections:

- Background information of participants – to find basic information about the participants such as gender, marital status, home/mother language, mining site and type of dwelling to find ways of disseminating appropriate HIV/AIDS information.
- Participants' opinions and perceptions regarding HIV/AIDS and its transmission – to find the current level of understanding of HIV/AIDS of participants. This will assist in finding out their current knowledge of HIV/AIDS, their perceptions or misperceptions, attitudes and behaviour towards HIV/AIDS.
- Information dissemination preferences – to find their preferred media and preferred language. This will assist in disseminating appropriate HIV/AIDS information using correct communication channels and their preferred language. In other words, this will assist in closing the HIV/AIDS information knowledge gap if it exists.

4.2 DATA COLLECTION AND TIME FRAMES

Questionnaires were sent to the Safety, Health, Environment and Quality (SHEQ) managers at Sishen and Thabazimbi mines (Sylvia Hattingh and Sabelo Gumede) who took responsibility for distributing and collecting the questionnaires. Each manager received two sets of questionnaires, one written in Tswana and the other in English. The questionnaires were distributed to the people in the target population who were starting their shifts and to those who were attending compulsory work-related medical check-ups for mining-related illnesses such as those connected with dust and noise, from 15 November 2011 to 19 December 2011. All the questionnaires were manually completed. The completed questionnaires were returned to Head Office (Pretoria) where the researcher is based between 10 December and 20 December 2011.

4.3 FINDINGS OF BACKGROUND INFORMATION

The survey was to obtain the participants' basic information, current HIV/AIDS knowledge, HIV/AIDS perceptions and opinions and to find out their preferred media and preferred languages. This will assist in disseminating appropriate HIV/AIDS information to them. Findings will be used to inform an HIV/AIDS awareness campaign at the company, providing valuable information on HIV/AIDS perceptions, transmission and prevention. Table 4.1 summarises the detailed data collected from the two mines.

Table 4.1 Detailed data findings

Total target population	324
Total target population at Thabazimbi	106
Total target population at Sishen	218
Total number of returned &completed questionnaires	268
Total number of Thabazimbi respondents – males	79
Total number of Thabazimbi respondents – females	19
Total number of Thabazimbi respondents – not prepared to answer on gender	0
Total number of Sishen respondents – males	137
Total number of Sishen respondents – females	31
Total number of Sishen respondents – Not prepared to answer on gender	2

4.3.1 RESPONSE RATE OF THE FINDINGS FROM THE TWO MINES

Table 4.2 Response rate

Overall response rate	80.72%
Response rate at Thabazimbi mine	92.45%
Response rate at Sishen mine	77.98%
Response rate at Thabazimbi mine with "not prepared to answer" on gender	0%
Response rate at Sishen mine with "not prepared to answer" on gender	0.91%

4.4 DATA ANALYSIS FOR THE MINES

4.4.1 THABAZIMBI MINE ANALYSIS

The questionnaires were returned on 10 December 2011. There were more questionnaires answered in English than in Tswana despite having more Tswana speaking respondents. The Thabazimbi background information is summarised in Figure 4.1 and Table 4.3

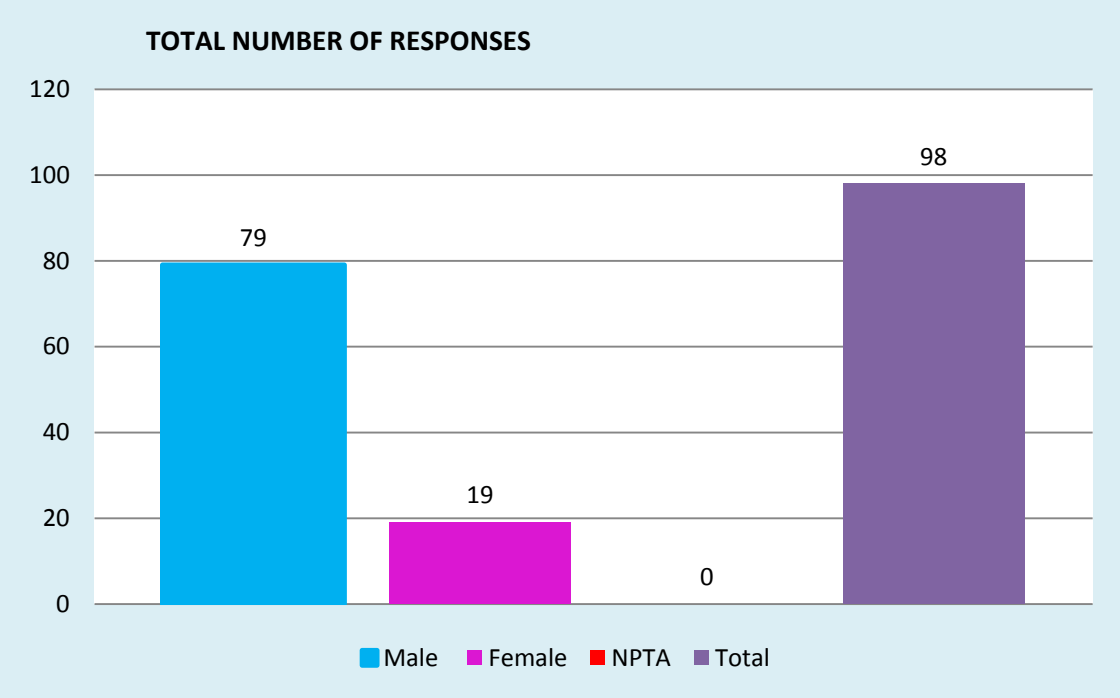

Figure 4.1 Thabazimbi background information (NPTA – not prepared to answer)

Table 4.3 Thabazimbi background information (NPTA – not prepared to answer)

	NPTA	Male	Female	
TOTAL NUMBER OF RESPONSES	**0**	**79**	**19**	**98**

Home language	NPTA	Male	Female	Total
	0	**79**	**19**	**98**
Afrikaans	0	7	6	13
English	0	6	0	6
Ndebele	0	0	0	0
Pedi	0	17	2	19
Sotho	0	1	2	3
Swazi	0	0	0	0
Tsonga	0	6	0	6
Tswana	0	33	6	39
Xhosa	0	1	1	2
Venda	0	2	2	4
Zulu	0	6	0	6
NPTA	0	0	0	0

Marital Status	Male	Female	Total
	79	**19**	**98**
Single	18	4	22
Married	31	10	41
Widow/ Widower	2	1	3
Separated	1	0	1
Live-together	13	2	15
NPTA	14	2	16

Type of Dwelling	Male	Female	Total
	79	**19**	**98**
Company house	16	2	18
Company hostel	26	4	30
Own House	19	8	27
Other	11	4	15
NPTA	7	1	8

4.4.2 SISHEN MINE ANALYSIS

The questionnaires were returned on 20 December 2011. There were more questionnaires answered in Tswana than in English and there were more Tswana respondents at Sishen than Thabazimbi. The Sishen background information is summarised in Figure 4.2 and Table 4.4

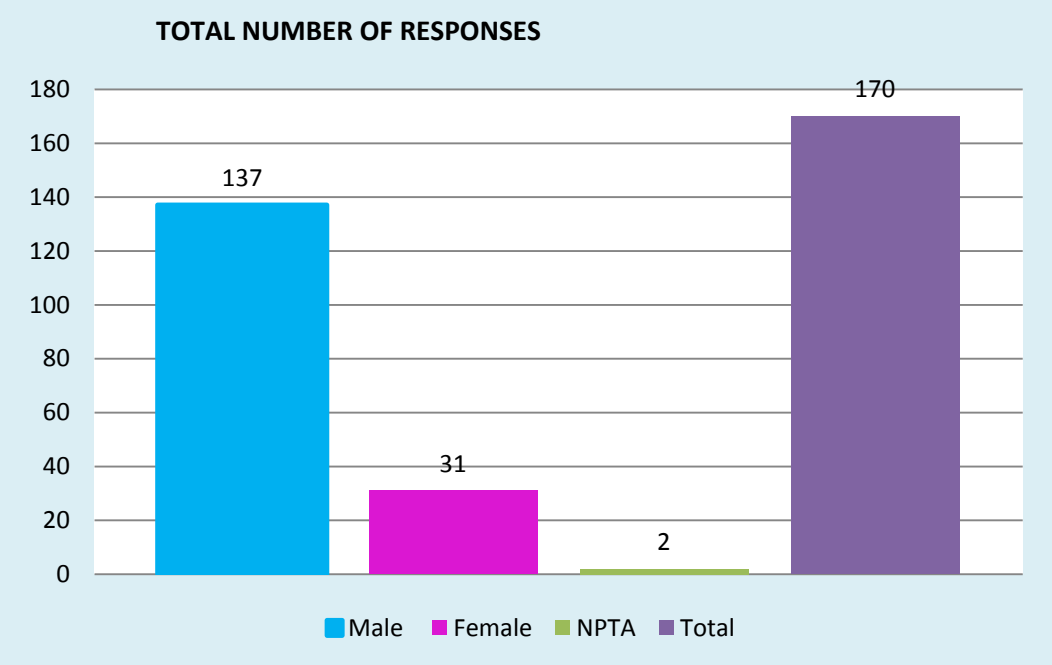

Figure 4.2 Sishen background information (NPTA – not prepared to answer)

Table 4.4 Sishen background information (NPTA – not prepared to answer)

	NPTA	Male	Female	
TOTAL	2	137	31	170

Home language	NPTA	Male	Female	Total
Total	**2**	**137**	**31**	**170**
Afrikaans	0	18	4	22
English	0	6	1	7
Ndebele	0	0	0	0
Pedi	0	5	4	9
Sotho	0	30	6	36
Swazi	0	0	0	0
Tsonga	0	3	0	3
Tswana	0	63	13	76
Xhosa	0	9	2	11
Venda	0	1	0	1
Zulu	0	2	1	3
NPTA	2	0	0	2

Marital Status	NPTA	Male	Female	Total
Total	2	137	31	170
Single	0	19	5	24
Married	0	47	17	64
Widow/ Widower	0	5	1	6
Separated	0	14	2	16
Live-together	0	41	2	43
NPTA	2	11	4	17

Type of Dwelling	NPTA	Male	Female	Total
Total	2	137	31	170
Company house	0	22	7	29
Company hostel	0	31	5	36
Own House	0	45	6	51
Other	0	36	12	48
NPTA	2	3	1	6

There were two questionnaires from Sishen mine where the participants did not want to disclose their gender (they selected "Not prepared to answer" option). The two respondents were not prepared to answer on HIV/AIDS opinions, perceptions and on the HIV/AIDS knowledge questions but they were prepared to answer on preferred media and language. The two participants were also not willing to reveal their basic background information such as marital status, mother/home language and type of dwelling. In other words, they didn't want to answer any questions which might reveal their identity or show how much they know about HIV/AIDS but they showed their desire to receive HIV/AIDS information in their preferred language. The information of the two respondents was included in the data findings.

4.4.3 THABAZIMBI MINE – MARITAL STATUS IN RELATION TO HIV/AIDS KNOWLEDGE

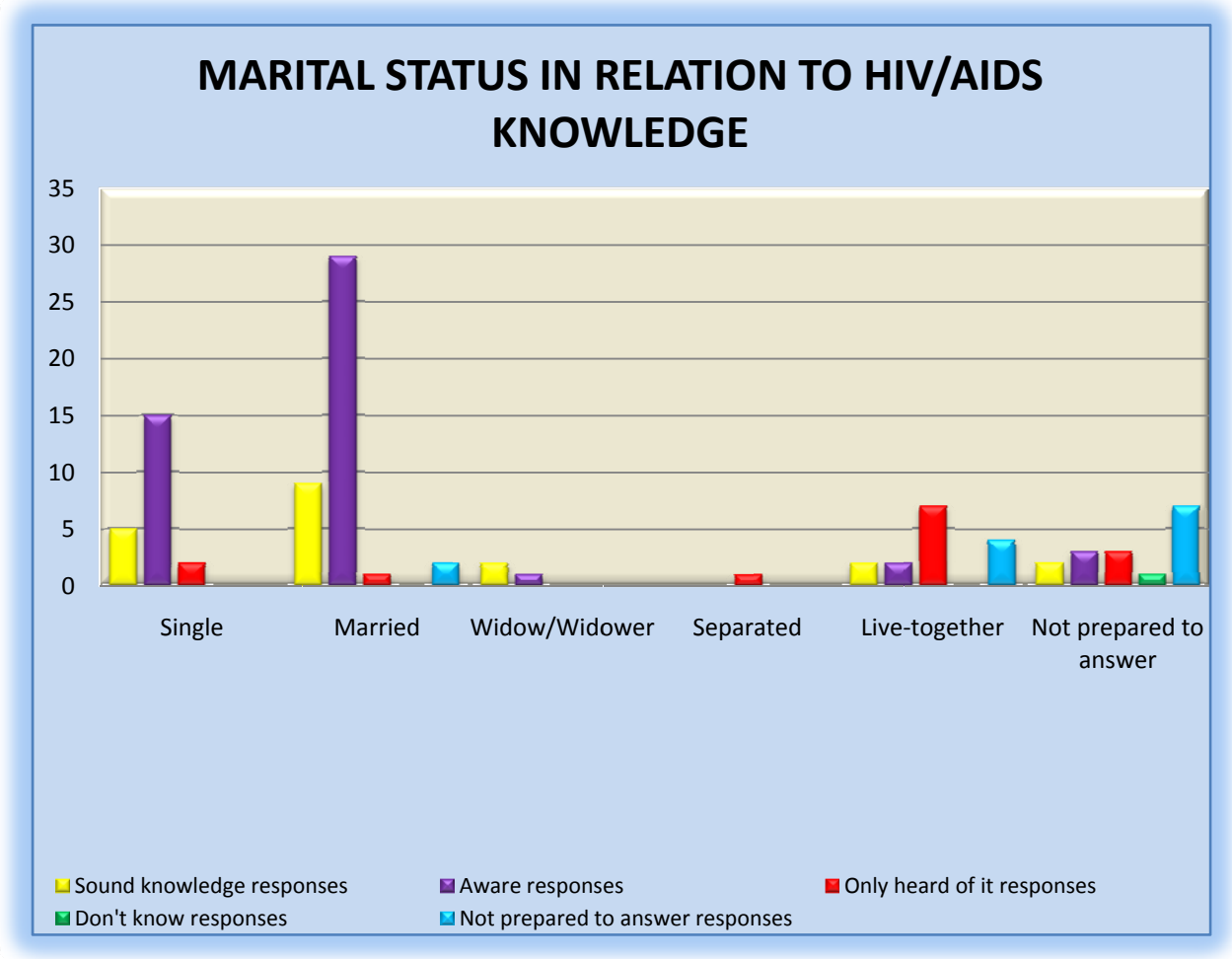

Figure 4.3 Thabazimbi marital status Vs. HIV/AIDS knowledge

The response rate of the outcome regarding marital status in relation to HIV/AIDS knowledge at Thabazimbi is shown in Table 4.5

Table 4.5 Thabazimbi marital status Vs. HIV/AIDS knowledge

	Single	Married	Widow/ Widower	Separated	Live-together	Not prepared to answer	Number of responses
Sound knowledge	25%	45%	10%	0%	10%	10%	20
Aware	30%	58%	2%	0%	4%	6%	50
Only heard of it	14.29%	7.14%	0%	7.14%	50%	21.43%	14
Don't know	0%	0%	0%	0%	0%	100%	1
Not prepared to answer	0%	15.38%	0%	0%	30.77%	53.85%	13

The analysis of the findings expressed in Table 4.5 is as follows:

- "Married" – this category has the highest percentage of respondents who indicated that they had a sound knowledge of HIV/AIDS.
- "Married" – this category has the highest percentage of respondents who indicated that they were aware of HIV/AIDS and the "Separated" category again indicated that they were not aware of HIV/AIDS.
- "Live-together" – this category has the highest percentage of respondents who indicated that they had only heard of HIV/AIDS.
- "Not prepared to answer" – this category has the only respondent who indicated that he/she doesn't know about HIV/AIDS
- "Not prepared to answer" – this category has the highest percentage of respondents who indicated that they were not willing to reveal their HIV/AIDS knowledge.

4.4.4 SISHEN MINE – MARITAL STATUS IN RELATION TO HIV/AIDS KNOWLEDGE

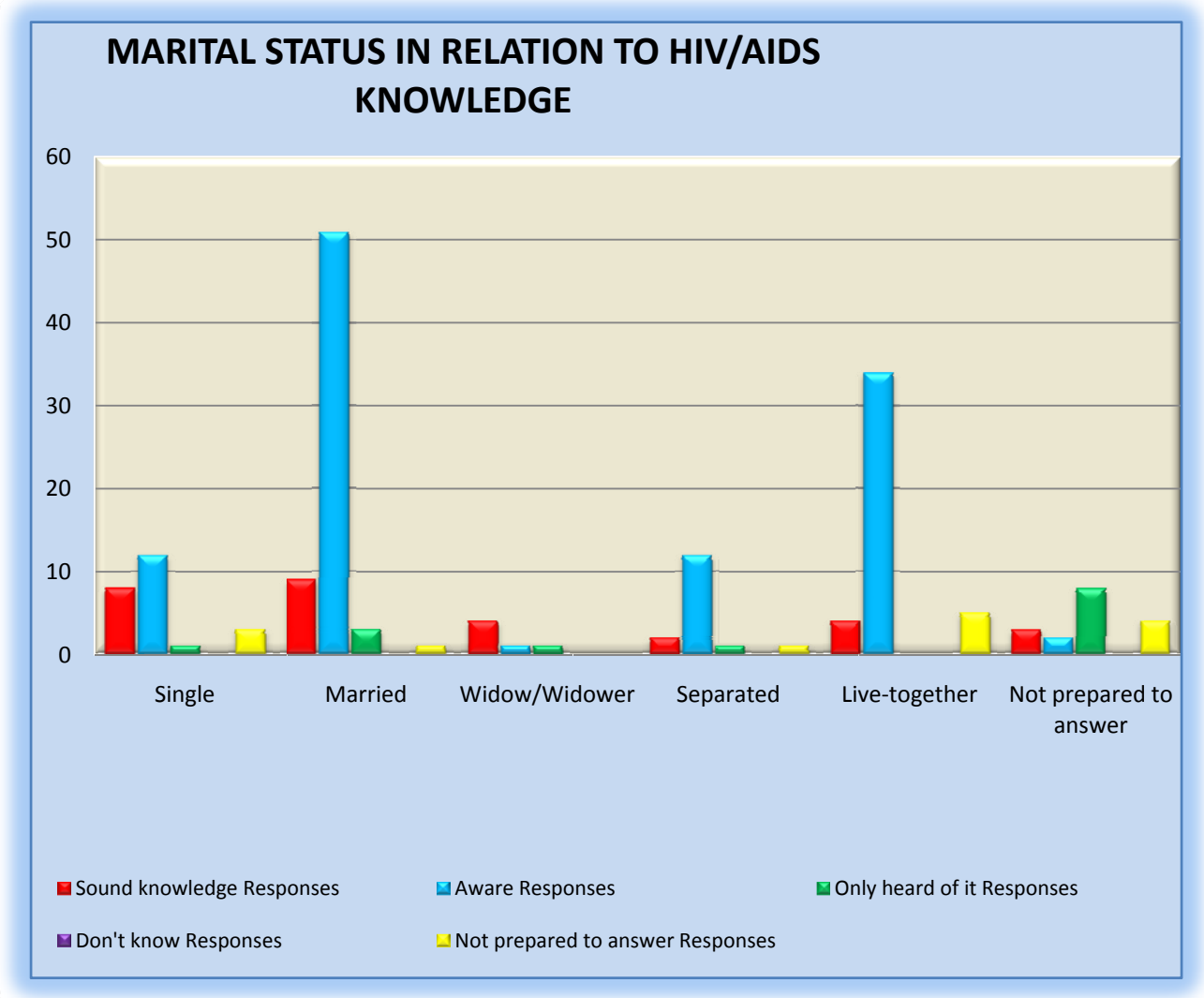

Figure 4.4 Sishen marital status Vs. HIV/AIDS knowledge

The response rate of the outcome regarding marital status in relation to HIV/AIDS knowledge at Sishen is shown in Table 4.6

Table 4.6 Sishen marital status VS HIV/AIDS knowledge

	Single	Married	Widow/ Widower	Separated	Live-together	Not prepared to answer	Number of responses
Sound knowledge	26.67%	30%	13.33%	6.67%	13.33%	10%	30
Aware	10.71%	45.54%	0.89%	10.71%	30.36%	1.79%	112
Only heard of it	7.14%	21.43	7.14%	7.14%	0%	57.14%	14
Don't know	0%	0%	0%	0%	0%	0%	0
Not prepared to answer	21.43%	7.14%	0%	7.14%	35.71%	28.57%	14

The analysis of the findings expressed in Table 4.6 is as follows:

- "Married" - this category has the highest percentage of respondents who indicated that they had a sound knowledge of HIV/AIDS.
- "Married" - this category has the highest percentage of respondents who indicated that they were aware of HIV/AIDS.
- "Not prepared to answer" - this category has the highest percentage of respondents who indicated that they had only head of HIV/AIDS.
- There were no respondents in any of the six categories who indicated that they did not know about HIV/AIDS.
- "Live-together" -this category has the highest percentage of respondents who indicated that they were not willing to reveal their HIV/AIDS knowledge.

4.4.5 THABAZIMBI - TYPE OF DWELLING IN RELATION TO HIV/AIDS KNOWLEDGE

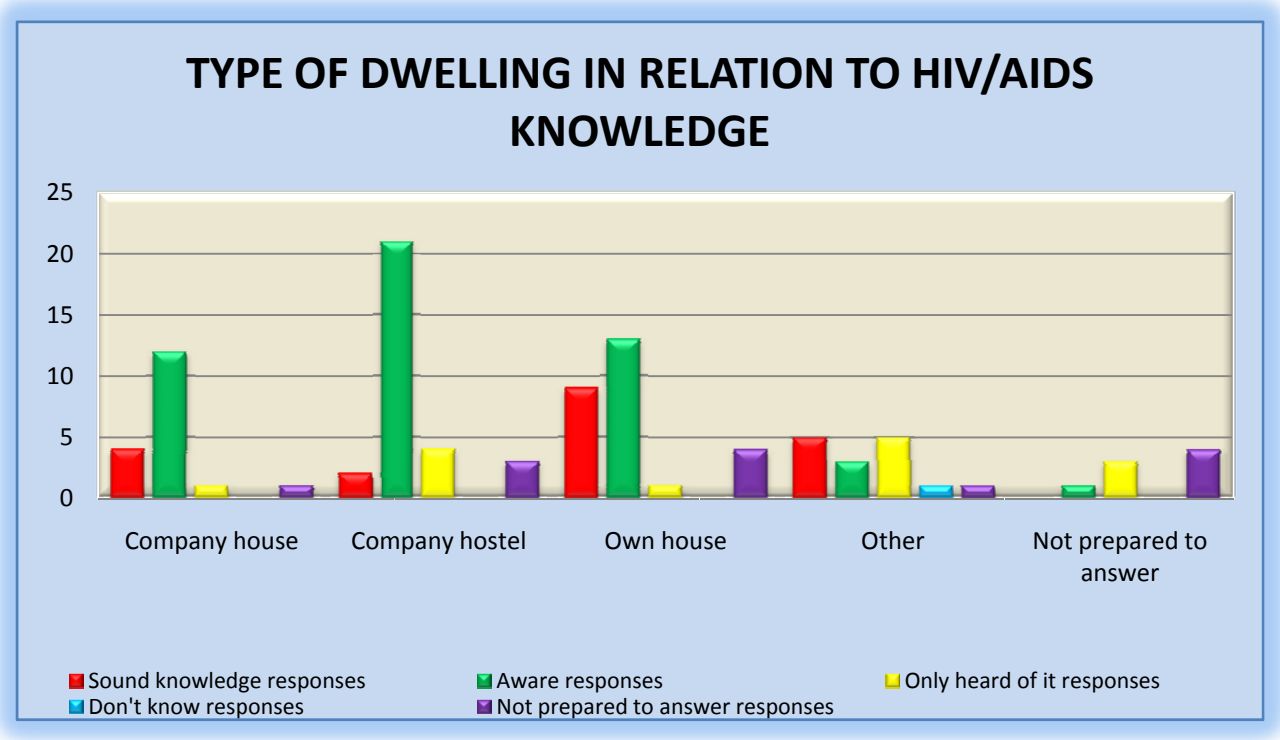

Figure 4.5 Thabazimbi type of dwelling vs. HIV/AIDS knowledge

The response rate of the outcome regarding type of dwelling in relation to HIV/AIDS knowledge at Thabazimbi is shown in Table 4.7

Table 4.7 Thabazimbi type of dwelling vs. HIV/AIDS knowledge

	Company house	Company hostel	Own house	Other	Not prepared to answer	Number of responses
Sound knowledge	20%	10%	45%	25%	0%	20
Aware	24%	42%	26%	6%	2%	50
Only heard of it	7.14%	28.57%	7.14%	35.71%	21.43%	14
Don't know	0%	0%	0%	100%	0%	1
Not prepared to answer	7.69%	23.08%	30.77%	7.69%	30.77%	13

The analysis of the findings expressed in Table 4.7 is as follows:

- "Own house" – this category has the highest percentage of respondents who indicated that they had a sound knowledge of HIV/AIDS.
- "Company hostel" – this category has the highest percentage of respondents who indicated that they were aware of HIV/AIDS.
- "Other" – this category has the highest percentage of respondents who indicated that they had only heard of HIV/AIDS.
- "Other" – this category has the only respondent who indicated that he/she doesn't know about HIV/AIDS
- "Not prepared to answer" – this category has the highest percentage of respondents who indicated that they were not willing to reveal their HIV/AIDS knowledge.

4.4.6 SISHEN – TYPE OF DWELLING IN RELATION TO HIV/AIDS KNOWLEDGE

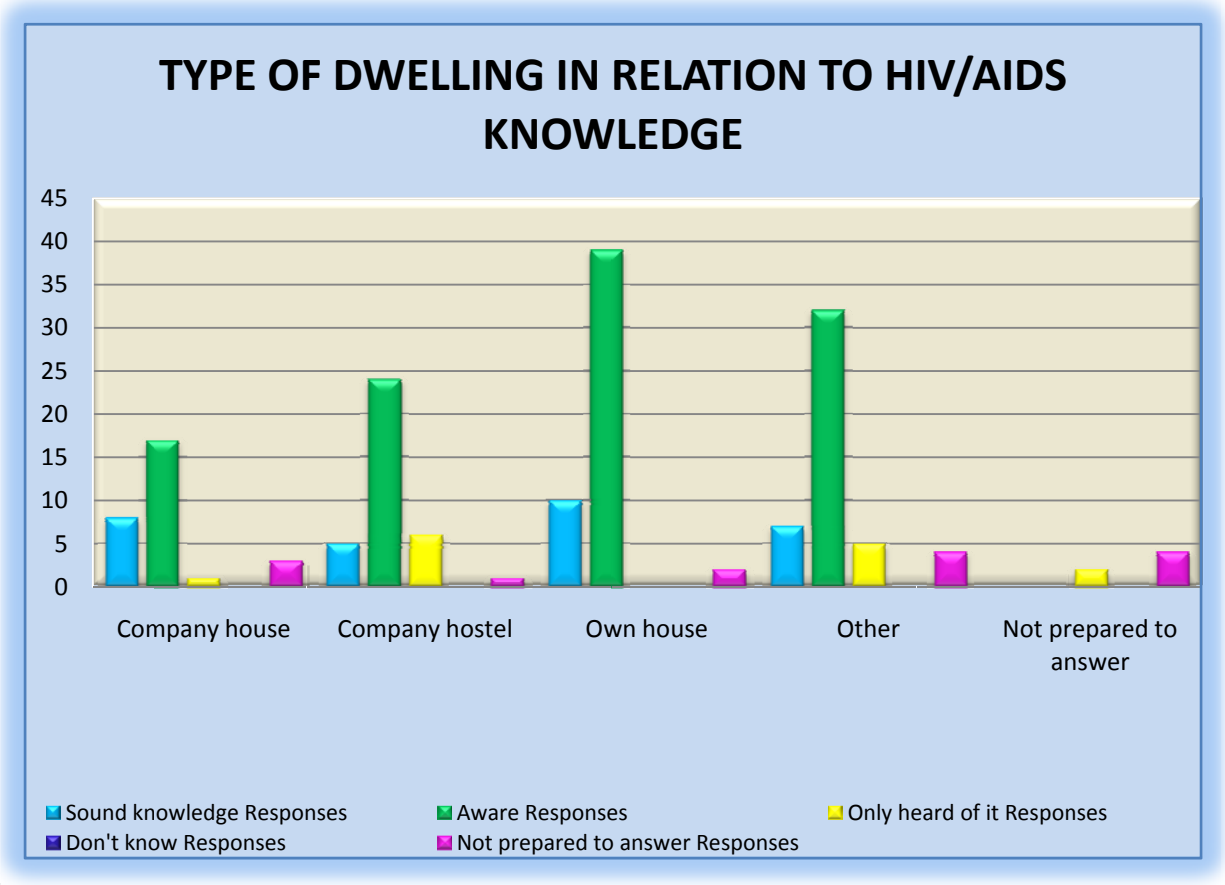

Figure 4.6 Sishen type of dwelling vs. HIV/AIDS knowledge

Table 4.8 Sishen type of dwelling vs. HIV/AIDS knowledge

	Company house	Company hostel	Own house	Other	Not prepared to answer	Number of responses
Sound knowledge	26.67%	16.67%	33.33%	23.33%	0%	30
Aware	15.18%	21.43%	34.82%	28.57%	0%	112
Only heard of it	7.14%	42.86%	0%	35.71%	14.29%	14
Don't know	0%	0%	0%	0%	0%	0
Not prepared to answer	21.43%	7.14%	14.29%	28.57%	28.57%	14

The analysis of the findings expressed in Table 4.8 is as follows:

- "Own house" – this category has the highest percentage of respondents who indicated that they had a sound knowledge of HIV/AIDS
- "Own house" – this category has the highest percentage of respondents who indicated that they were aware of HIV/AIDS.
- "Company hostel" – this category has the highest percentage of respondents who indicated that they had only heard of HIV/AIDS.
- There were no respondents in any of the six categories who indicated that they didn't know about HIV/AIDS.
- "Not prepared to answer" and "Other" – these categories have the highest percentage of respondents who indicated that they were not willing to reveal their HIV/AIDS knowledge.

4.4.7 THABAZIMBI – HIV/AIDS OPINION

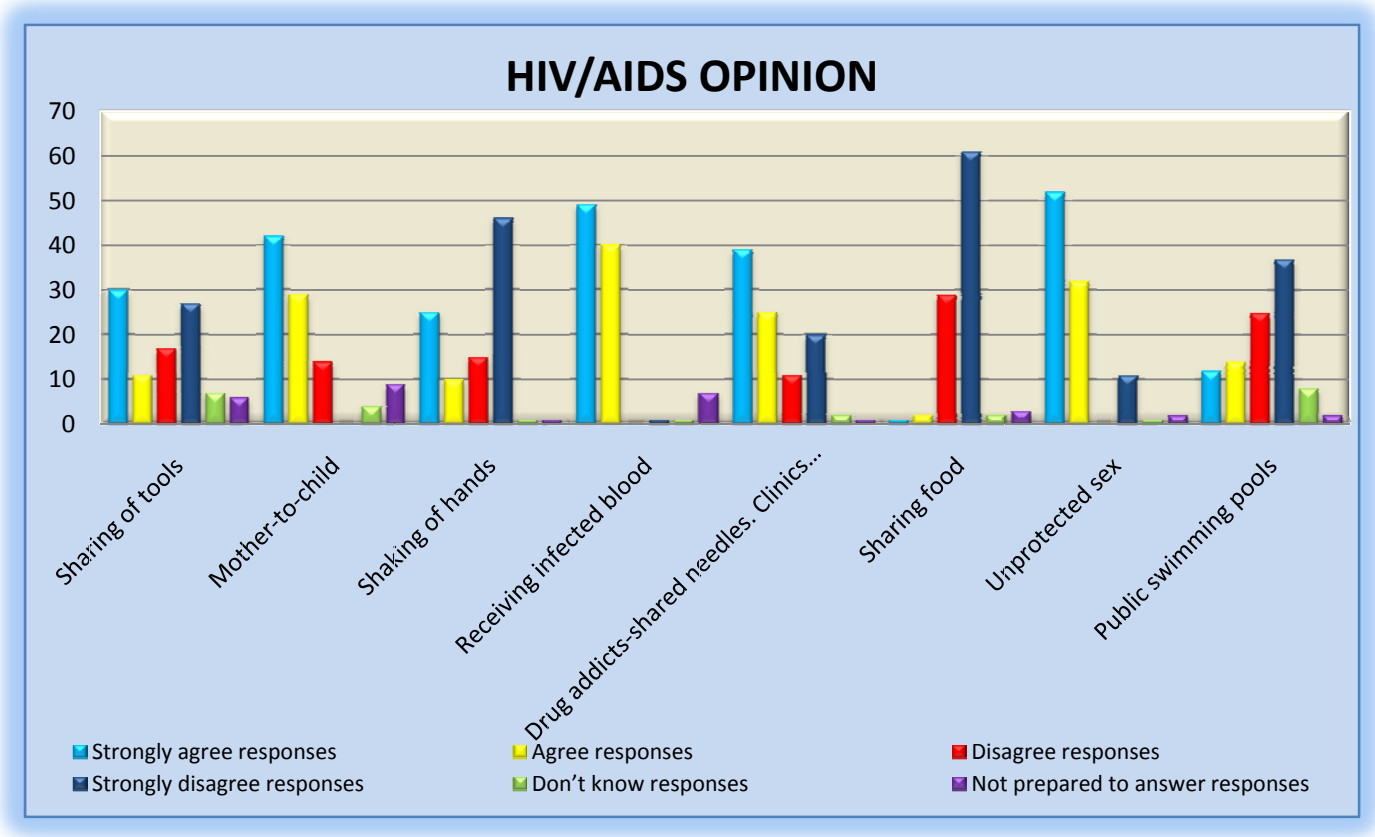

Figure 4.7 Thabazimbi – HIV/AIDS opinion

Table 4.9 Thabazimbi – HIV/AIDS opinion

Opinion	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Not prepared to answer	Total number of responses
Sharing of tools	30.61%	11.22%	17.35%	27.55%	7.14%	6.12%	98
Mother to child	42.88%	29.59%	14.29%	0%	4.08%	9.18%	98
Shaking of hands	25.51%	10.20%	15.31%	46.94%	1.02%	1.02%	98
Receiving infected blood	50%	40.82%	0%	1.02%	1.02%	7.14%	98

sharing/re-using needles	39.78%	25.51%	11.22%	20.41%	2.04%	1.02%	98
Sharing food	1.02%	2.04%	29.59%	62.24%	2.04%	3.06%	98
Unprotected sex	53.06%	32.65%	0%	11.22%	1.02%	2.04%	98
Public swimming pools	12.24%	14.29%	25.51%	37.76%	8.16%	2.04%	98

The analysis of the findings expressed in Table 4.9 is as follows:

- 41.83% of Thabazimbi respondents believed that you can contract HIV by sharing tools, 44.9% did not believe that a person can contract HIV by sharing tools, 7.14% did not know if tool sharing can cause HIV or not and 6.12% were not prepared to answer.
- 72.47% of Thabazimbi respondents believed that HIV can be passed from mother to child, 14.29% did not believe that HIV can be passed from mother to child, 4.08% of respondents did not know if HIV can be passed from mother to child and 9.18% were not prepared to answer.
- 35.71% of Thabazimbi respondents believed that HIV can be passed on by shaking hands, 62.25% didn't believe that HIV can be transmitted by shaking hands, 1.02% did not know if shaking of hands can transmit HIV or not and 1.02% were not prepared to answer.
- 90% of respondents believed that receiving infected blood cause HIV, 1.02% of respondents did not believe that receiving infected blood can cause HIV, 1.02% did not know if receiving of infected blood can cause HIV and 7.14% were not prepared to answer.
- 65.29% of respondents believed that drug addicts sharing needles or clinics where needles are re-used can cause HIV, 31.63% did not believe it can cause HIV, 2.04% did not know if it can cause HIV and 1.02% of the respondents were not prepared to answer.
- 3.06% of respondents believed that sharing of food can cause HIV, 91.83% did not believe that sharing of food can cause HIV, 2.04% did not know if sharing of food can cause HIV and 3.06% were not prepared to answer.

- 85.71% of the respondents believed that having unprotected sex causes HIV, 11.22% did not believe that having unprotected sex can cause HIV, 1.02% did not know if having unprotected sex can cause HIV and 2.04% were not prepared to answer.
- 26.53% of the respondents believed that using public swimming pools can cause HIV, 63.27% did not believe that using public swimming pools can cause HIV, 8.16% did not know if using public swimming pools can cause HIV and 2.04% were not prepared to answer.

4.4.8 SISHEN – HIV/AIDS OPINION

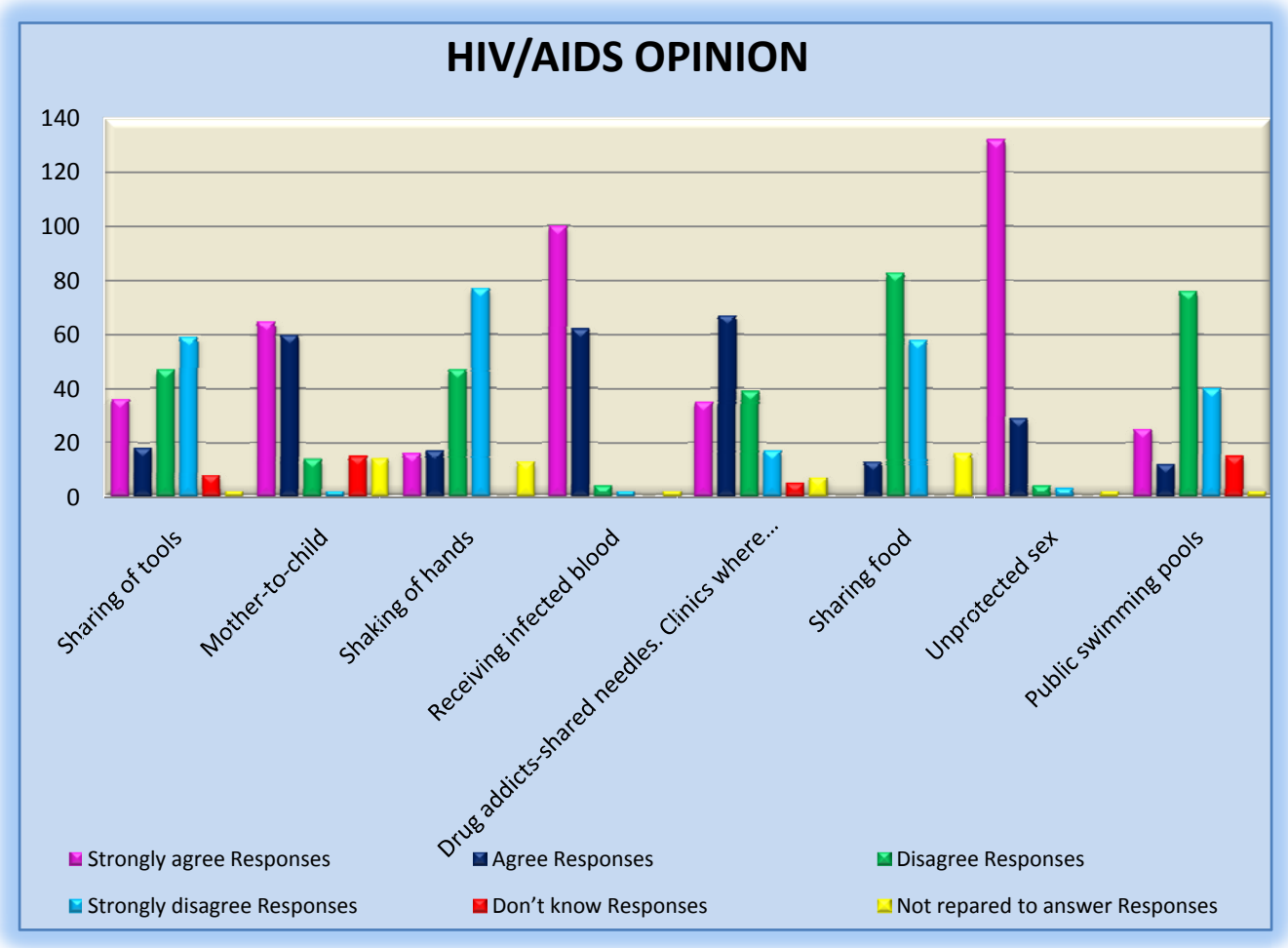

Figure 4.8 Sishen – HIV/AIDS opinion

Table 4.10 Sishen – HIV/AIDS opinion

Opinion	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Not prepared to answer	Total number of responses
Sharing of tools	21.18%	10.59%	27.65%	34.71%	4.71%	1.18%	170
Mother to child	38.24%	35.29%	8.24%	2.86%	8.82%	8.24%	170
Shaking of hands	9.41%	10%	27.65%	45.03%	0%	7.65%	170
Receiving infected blood	58.82%	36.47%	2.35%	1.18%	0%	1.18%	170
sharing/re-using needles	20.59%	39.41%	22.94%	10%	2.94%	4.12%	170
Sharing food	0%	7.65%	48.82%	34.12%	0%	9.41%	170
Unprotected sex	77.65%	17.06%	2.35%	1.76%	0%	1.18%	170
Public swimming pools	14.71%	7.06%	44.71%	23.53%	8.82%	1.18%	170

The analysis of the findings expressed in Table 4.10 is as follows:

- 31.77% of Sishen respondents believed that you can contract HIV by sharing tools, 62.36% did not believe that a person can contract HIV by sharing tools, 4.71% did not know if tool sharing can cause HIV and 1.18% of the respondents were not prepared to answer.
- 73.53% of Sishen respondents believed that HIV can be passed from mother to child, 11.1% did not believe that HIV can be passed from mother to child, 8.82% of respondents did not know if HIV can be passed from mother to child and 8.24% were not prepared to answer.

- 19.41% of Sishen respondents believed that HIV can be passed on by shaking hands, 72.68% did not believe that HIV can be transmitted by shaking hands, 0% did not know if shaking of hands can transmit HIV and 7.65% were not prepared to answer.
- 95.29% of respondents believed that receiving infected blood causes HIV, 3.53% of respondents did not believe that receiving infected blood can cause HIV, there were no respondents who indicated that they did not know if receiving of infected blood can cause HIV and 1.18% was not prepared to answer.
- 60% of respondents believed that drug addicts sharing needles or clinics where needles are re-used can cause HIV, 32.94% did not believe it can cause HIV, 2.94% did not know if it can cause HIV and 4.12% were not prepared to answer.
- 7.65% of respondents believed that sharing of food can cause HIV, 82.94% did not believe that sharing of food can cause HIV, there were no respondents who indicated that they did not know if sharing of food can cause HIV and 9.41% were not prepared to answer.
- 94.71% of the respondents believed that having unprotected sex causes HIV, 4.11% did not believe that having unprotected sex can cause HIV, 0% did not know if having unprotected sex can cause HIV and 1.18% was not prepared to answer.
- 21.77% of the respondents believed that using public swimming pools causes HIV, 68.24% did not believe that using public swimming pools can cause HIV, 8.82% did not know if using public swimming pools can cause HIV and 1.18% was not prepared to answer.

4.4.9 THABAZIMBI – HIV/AIDS PERCEPTIONS

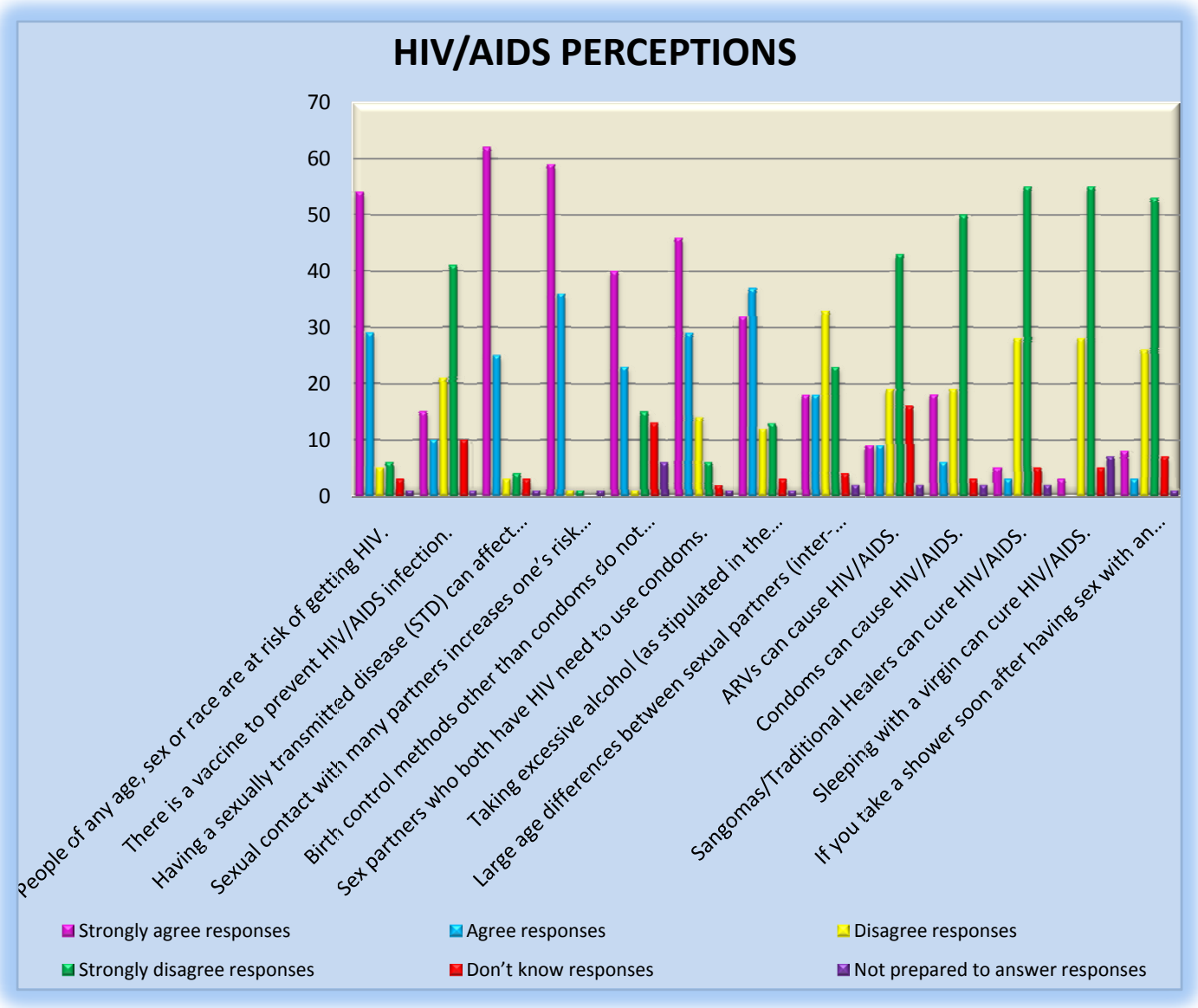

Figure 4.9 Thabazimbi – HIV/AIDS perceptions

Table 4.11 Thabazimbi – HIV/AIDS perceptions

Perceptions	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Not prepared to answer	Total number of responses
People of any age, sex or race are at risk of getting HIV	55.10%	29.59%	5.10%	6.12%	3.06%	1.02%	98
There is a vaccine to prevent HIV/AIDS infection	15.31%	10.20%	21.43%	41.84%	10.20%	1.02%	98
Having a sexually transmitted disease (STD) can affect one's risk of getting HIV	63.27%	25.51%	3.06%	4.08%	3.06%	1.02%	98
Sexual contact with many partners increases one's risk of getting HIV.	60.20%	36.73%	1.02%	1.02%	0%	1.02%	98
Birth control methods other than condoms do not reduce the risk of HIV infection	40.82%	23.47%	1.02%	15.31%	13.27%	6.12%	98
Sex partners who both have HIV need to use condoms.	46.94%	29.59%	14.29%	6.12%	2.04%	1.02%	98
Taking excessive alcohol increases one's risk behaviour	32.65%	37.76%	12.24%	13.27%	3.06%	1.02%	98
Large age differences between sexual partners can increase risk of	18.37%	18.37%	33.67%	23.47%	4.08%	2.04%	98

contracting HIV/AIDS							
ARVs can cause HIV/AIDS	9.18%	9.18%	19.39%	43.88%	16.33%	2.04%	98
Condoms can cause HIV/AIDS	18.37%	6.12%	19.39%	51.02%	3.06%	2.04%	98
Sangomas/Traditional Healers can cure HIV/AIDS	5.10%	3.06%	28.57%	56.12%	5.10%	2.04%	98
Sleeping with a virgin can cure HIV/AIDS	3.06%	0%	28.57%	56.12%	5.10%	7.14%	98
If you take a shower soon after having sex with an infected person it minimises the risk of HIV infection.	8.16%	3.06%	26.53%	54.08%	7.14%	1.02%	98

The analysis of the findings expressed in Table 4.11 is as follows:

- 84.69% of Thabazimbi respondents agreed that people of any age, sex or race are at risk of getting HIV, 11.22% did not agree that people of any age, sex or race are at risk of getting HIV, 3.06% did not know if people of any age, sex or race are at risk of getting HIV and 1.02% were not prepared to answer.
- 25.51% of Thabazimbi respondents agreed that there is a vaccine to prevent HIV/AIDS infection, 63.27% did not agree that there is a vaccine to prevent HIV/AIDS infection, 10.20% of respondents did not know if there is a vaccine to prevent HIV/AIDS infection and 1.02% were not prepared to answer.
- 88.78% of Thabazimbi respondents agreed that having a sexually transmitted disease (STD) can affect one's risk of getting HIV, 7.14% did not agree that having a sexually

transmitted disease (STD) can affect one's risk of getting HIV, 3.06% did not know if having a sexually transmitted disease (STD) can affect one's risk of getting HIV and 1.02% were not prepared to answer.

- 96.93% of Thabazimbi respondents agreed that sexual contact with many partners increases one's risk of getting HIV, 2.04% of respondents did not agree that sexual contact with many partners increases one's risk of getting HIV. There were no respondents who indicated that they did not know if sexual contact with many partners increases one's risk of getting HIV and 1.02% were not prepared to answer.
- 64.29% of Thabazimbi respondents agreed that birth control methods other than condoms do not reduce the risk of HIV infection, 16.33% did not agree that birth control methods other than condoms do not reduce the risk of HIV infection, 13.27% did not know if birth control methods other than condoms did not reduce the risk of HIV infection and 6.12% were not prepared to answer.
- 76.53% of Thabazimbi respondents agreed that sex partners who both have HIV need to use condoms, 20.41% did not agree that sex partners who both have HIV need to use condoms, 2.04% did not know if sex partners who both have HIV need to use condoms and 1.02% were not prepared to answer.
- 70.41% of Thabazimbi respondents agreed that taking excessive alcohol increases one's risk behaviour, 25.51% of Thabazimbi respondents did not agree that taking excessive alcohol increases one's risk behaviour, 3.06% did not know if taking excessive alcohol increases one's risk behaviour and 1.02% was not prepared to answer.
- 36.74% of Thabazimbi respondents agreed that large age differences between sexual partners can increase risk of contracting HIV/AIDS, 57.14% did not agree that large age differences between sexual partners can increase risk of contracting HIV/AIDS, 4.08% d did not know if large age differences between sexual partners can increase risk of contracting HIV/AIDS and 2.04% were not prepared to answer.
- 18.36% of Thabazimbi respondents agreed that ARVs can cause HIV/AIDS, 63.27% of respondents did not agree that ARVs can cause HIV/AIDS, 16.33% did not know if ARVs can cause HIV/AIDS and 2.04% were not prepared to answer.
- 24.49% of Thabazimbi respondents agreed that condoms can cause HIV/AIDS, 70.41% did not agree that condoms can cause HIV/AIDS, 3.06% did not know if condoms can cause HIV/AIDS and 2.04% were not prepared to answer.

- 8.16% of Thabazimbi respondents agreed that sangomas/traditional healers can cure HIV/AIDS, 84.69% did not agree that sangomas/traditional healers can cure HIV/AIDS, 5.10% did not know if sangomas/traditional healers can cure HIV/AIDS and 2.04% were not prepared to answer.
- 3.06% of Thabazimbi respondents agreed that sleeping with a virgin can cure HIV/AIDS, 84.69% did not agree that sleeping with a virgin can cure HIV/AIDS, 5.10% did not know if sleeping with a virgin can cure HIV/AIDS and 7.14% were not prepared to answer.
- 11.22% of Thabazimbi respondents agreed that if you take a shower soon after having sex with an infected person it minimises the risk of HIV infection, 80.61% did not agree that if you take a shower soon after having sex with an infected person it minimises the risk of HIV infection., 8.16% did not know if you take a shower soon after having sex with an infected person, if it minimises the risk of HIV infection and 2.04% were not prepared to answer.

4.4.10 SISHEN – HIV/AIDS PERCEPTIONS

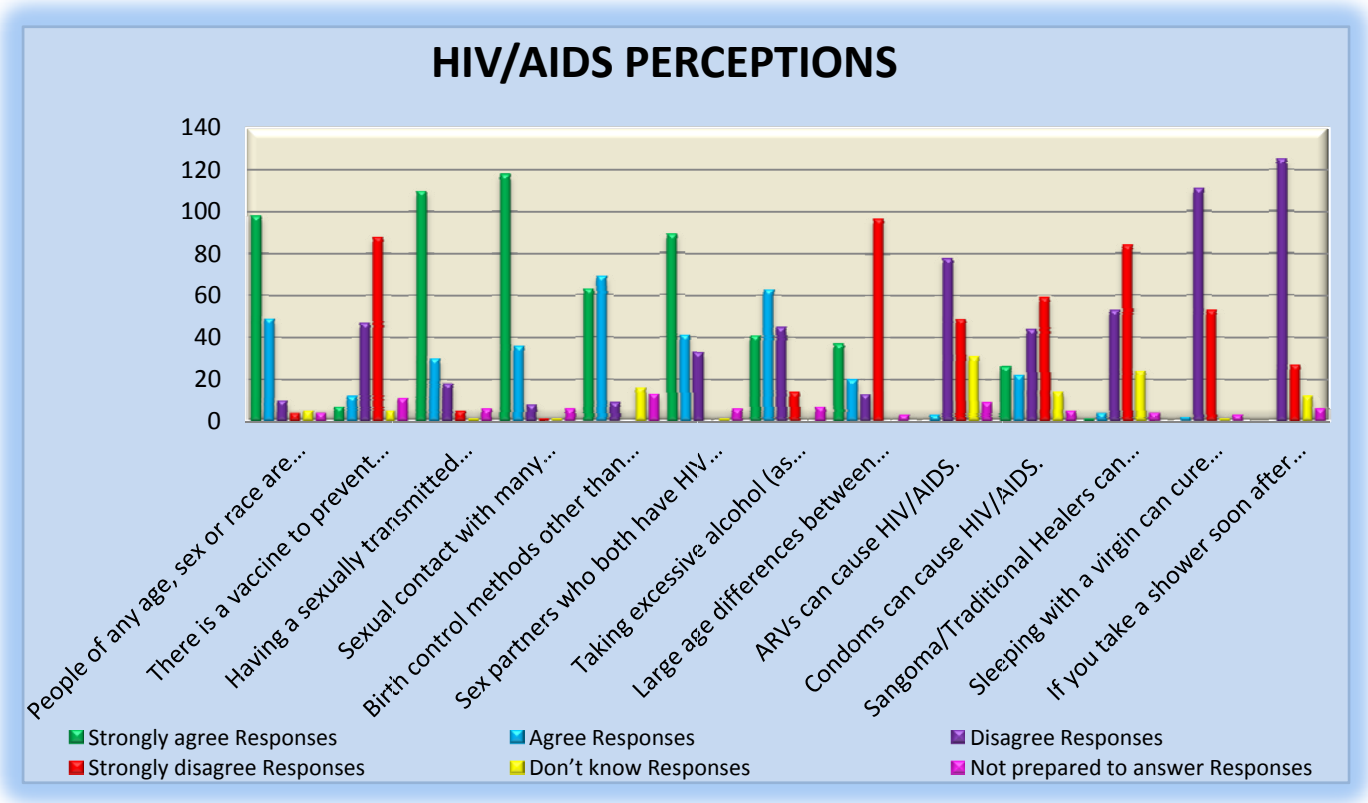

Figure 4.10 Sishen – HIV/AIDS perceptions

Table 4.12 Sishen – HIV/AIDS perceptions

Perceptions	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Not prepared to answer	Total number of responses
People of any age, sex or race are at risk of getting HIV	57.65%	28.82%	5.88%	2.35%	2.94%	2.35%	170
There is a vaccine to prevent HIV/AIDS infection	4.12%	7.06%	27.65%	51.76%	2.94%	1.18%	170
Having a sexually transmitted disease (STD) can affect one's risk of getting HIV	64.71%	17.65%	10.59%	2.94%	1.18%	3.53%	170
Sexual contact with many partners increases one's risk of getting HIV.	69.41%	21.18%	4.71%	1.18%	1.18%	3.53%	170
Birth control methods other than condoms do not reduce the risk of HIV infection	37.06%	40.59%	5.29%	0%	9.41%	7.65%	170
Sex partners who both have HIV need to use condoms.	52.35%	24.12%	19.41%	0%	1.18%	3.53%	170
Taking excessive alcohol increases one's risk behaviour	24.12%	37.06%	26.47%	8.24%	0%	4.12%	170

Large age differences between sexual partners can increase risk of contracting HIV/AIDS	21.76%	11.76%	7.65%	57.06%	0%	1.76%	170
ARVs can cause HIV/AIDS	0%	1.76%	45.88%	28.82%	18.24%	5.29%	170
Condoms can cause HIV/AIDS	15.29%	12.94%	25.88%	34.71%	8.24%	2.94%	170
Sangoma/Traditional Healers can cure HIV/AIDS	0.59%	2.35%	31.18%	49.41%	14.12%	2.35%	170
Sleeping with a virgin can cure HIV/AIDS	0%	1.18%	65.29%	31.18%	1.18%	1.76%	170
If you take a shower soon after having sex with an infected person it minimises the risk of HIV infection.	0%	0%	73.53%	15.88%	7.06%	3.53%	170

The analysis of the findings expressed in Table 4.12 is as follows:

- 86.46% of Sishen respondents agreed that people of any age, sex or race are at risk of getting HIV, 8.23% did not agree that people of any age, sex or race are at risk of getting HIV, 2.94% did not know if people of any age, sex or race are at risk of getting HIV and 2.35% were not prepared to answer.
- 11.18% of Sishen respondents agreed that there is a vaccine to prevent HIV/AIDS infection, 79.41% did not agree that there is a vaccine to prevent HIV/AIDS infection,

2.94% of respondents did not if there is a vaccine to prevent HIV/AIDS infection and 1.18% were not prepared to answer.

- 82.36% of Sishen respondents agreed that having a sexually transmitted disease (STD) can affect one's risk of getting HIV, 13.53% did not agree that having a sexually transmitted disease (STD) can affect one's risk of getting HIV, 1.18% did not know if having a sexually transmitted disease (STD) can affect one's risk of getting HIV and 3.53% were not prepared to answer.
- 90.59% of Sishen respondents agreed that sexual contact with many partners increases one's risk of getting HIV, 5.89% of respondents did not agree that sexual contact with many partners increases one's risk of getting HIV, 1.18% did not know if sexual contact with many partners increases one's risk of getting HIV and 3.53% were not prepared to answer.
- 77.65% of Sishen respondents agreed that birth control methods other than condoms do not reduce the risk of HIV infection, 5.29% did not agree that birth control methods other than condoms do not reduce the risk of HIV infection, 9.41% did not know if birth control methods other than condoms do not reduce the risk of HIV infection and 7.65% were not prepared to answer.
- 76.47% of Sishen respondents agreed that sex partners who both have HIV need to use condoms, 19.41% did not agree that sex partners who both have HIV need to use condoms, 1.18% did not know if sex partners who both have HIV need to use condoms and 3.53% were not prepared to answer.
- 61.18% of Sishen respondents agreed that taking excessive alcohol increases one's risk behaviour, 34.71% did not agree that taking excessive alcohol increase one's risk behaviour, 0% did not know if taking excessive alcohol increases one's risk behaviour and 4.12% were not prepared to answer.
- 33.52% of Sishen respondents agreed that large age differences between sexual partners can increase risk of contracting HIV/AIDS, 64.71% did not agree that large age differences between sexual partners can increase risk of contracting HIV/AIDS, there were no respondents who indicated that they did not know if large age differences between sexual partners can increase risk of contracting HIV/AIDS and 1.76% were not prepared to answer.
- 1.76% of Sishen respondents agreed that ARVs can cause HIV/AIDS, 74.7% of respondents did not agree that ARVs can cause HIV/AIDS, 18.24% did not know if ARVs can cause HIV/AIDS and 5.26% were not prepared to answer.

- 28.23% of Sishen respondents agreed that condoms can cause HIV/AIDS, 60.59% did not agree that condoms can cause HIV/AIDS, 8.24% did not know if condoms can cause HIV/AIDS and 2.94% were not prepared to answer.
- 2.94% of Sishen respondents agreed that sangomas/traditional healers can cure HIV/AIDS, 80.59% did not agree that sangomas/traditional healers can cure HIV/AIDS, 14.12% did not know if sangomas/traditional healers can cure HIV/AIDS and 2.35% were not prepared to answer.
- 1.18% of Sishen respondents agreed that sleeping with a virgin can cure HIV/AIDS, 96.47% did not agree that sleeping with a virgin can cure HIV/AIDS, 1.18% did not know if sleeping with a virgin can cure HIV/AIDS and 1.76% were not prepared to answer.
- There were no respondents at Sishen who agreed that if you take a shower soon after having sex with an infected person it minimises the risk of HIV infection, 89.41% did not agree that if you take a shower soon after having sex with an infected person it minimises the risk of HIV infection, 7.06% did not know if you take a shower soon after having sex with an infected person, if it minimises the risk of HIV infection and 3.53% were not prepared to answer.

4.4.11 THABAZIMBI – MOST PREFERRED MEDIA

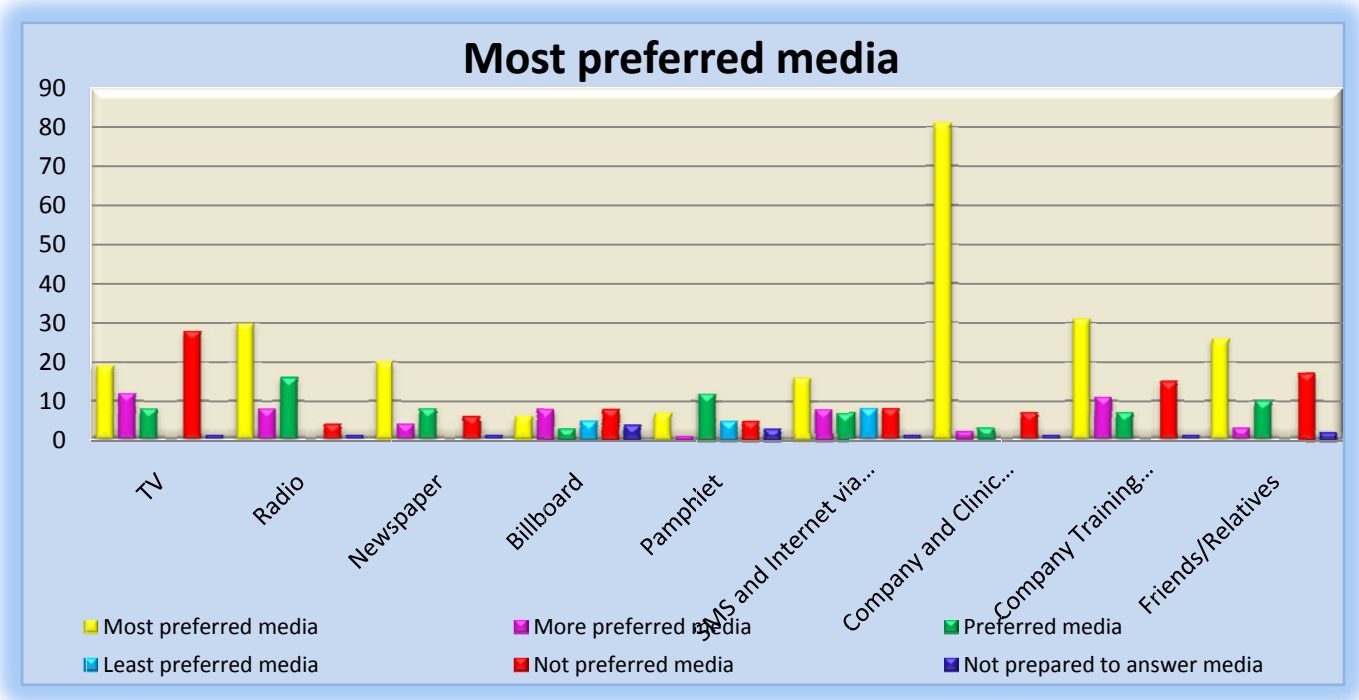

Figure 4.11 Thabazimbi – Most preferred media

Table 4.13 Thabazimbi – most preferred media

Media	Most preferred	Preferred	Not Preferred	Not prepared to answer	Total number of responses
Company and Clinic Workshops	83	3	7	1	94
Company Training Sessions	42	7	15	1	65
Radio	38	16	4	1	59
TV	31	8	28	1	68
Friends/Relatives	29	10	17	2	58
SMS and Internet via cell phone	24	7	16	1	48
Newspaper	24	8	6	1	39
Billboard	14	3	13	4	34
Pamphlet	8	12	10	3	33

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The analysis of the findings expressed in Table 4.13 is as follows:

Owing to the fact that the respondents had options when selecting their most preferred media, the numbers do not always add up to the total number of respondents at Thabazimbi. Some of the respondents selected more than one media as their most preferred.

- 83 (84.69%) of Thabazimbi respondents selected company and clinic workshops as their most preferred media. According to the respondents' statistics, it came up as the 1st most preferred media choice on the list.
- 42 (42.86%) of Thabazimbi respondents selected company training sessions as their most preferred media. According to the respondents' statistics, it came up as the 2nd most preferred media choice on the list.
- 38 (38.78%) of Thabazimbi respondents selected radio as their most preferred medium. According to the respondents' statistics, it came up as the 3rd most preferred media choice on the list.
- 31 (31.63%) of Thabazimbi respondents selected TV as their most preferred medium. According to the respondents' statistics, it came up as the 4th most preferred media choice on the list.

- 29 (29.59%) Thabazimbi respondents selected friends and family as their most preferred medium. According to the respondents' statistics, it came up as the 5th most preferred media choice on the list. Most respondents who selected this medium were men, and most women classified it as the not preferred type of medium.
- 24 (24.49%) Thabazimbi respondents selected newspaper and SMS and internet via cell phone as their most preferred media. According to the respondents' statistics, they came up as the 6th most preferred media choice on the list.
- 14 (14.29) Thabazimbi respondents selected billboard as their most preferred medium. According to the respondents' statistics, it came up as the 7th most preferred media choice on the list.
- 8 (8.16%) of Thabazimbi respondents selected pamphlet as their most preferred medium. According to the respondents' statistics, it came up as the least 'most preferred' media choice.

4.4.12 SISHEN – MOST PREFERRED MEDIA

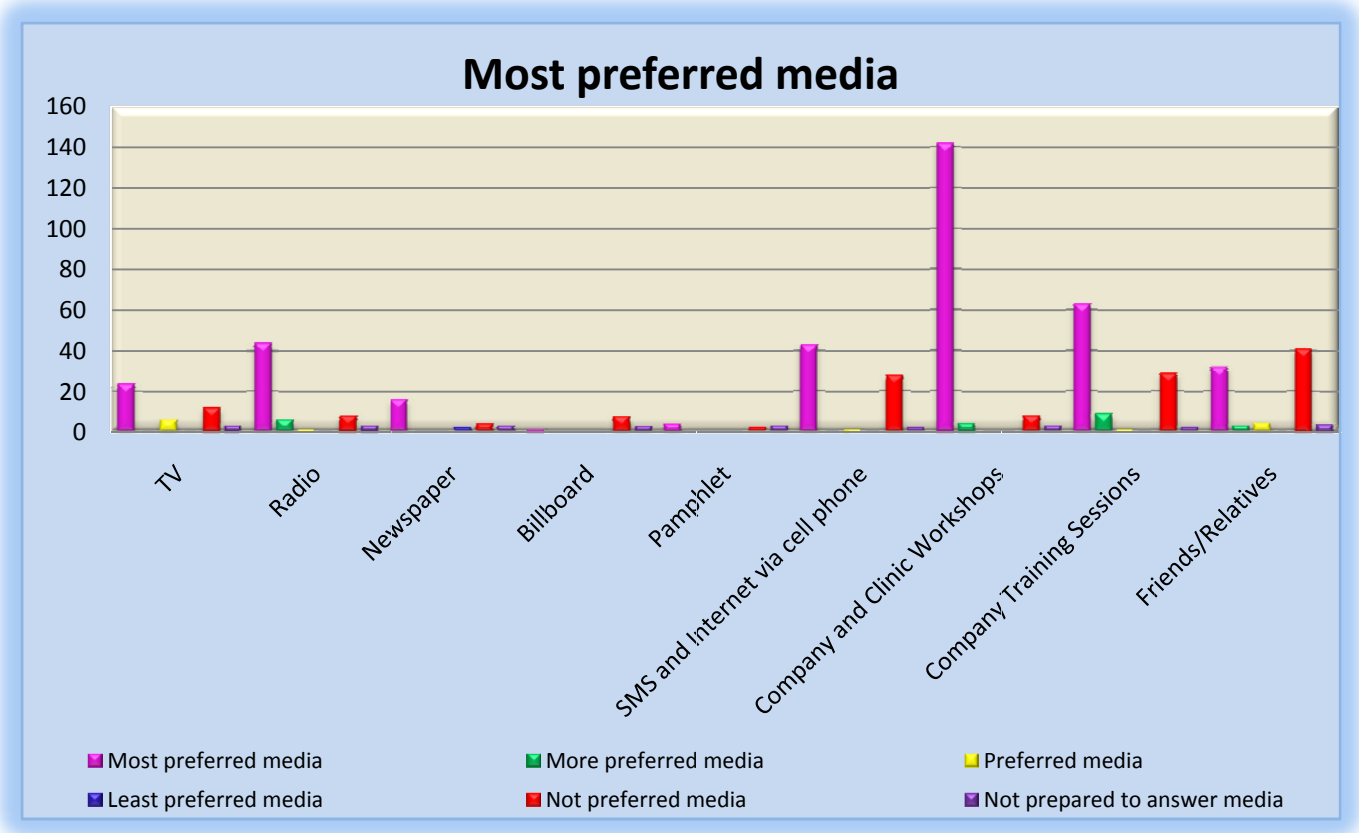

Figure 4.12 Sishen – most preferred media

Table 4.14 Sishen – most preferred media

Media	Most preferred	Preferred	Not Preferred	Not prepared to answer	Total number of responses
Company and Clinic Workshops	146	0	8	3	157
Company Training Sessions	72	1	29	2	104
Radio	50	1	8	3	62
SMS and Internet via cell phone	43	1	28	2	74
Friends/Relatives	35	4	41	4	84
TV	24	6	12	3	45
Newspaper	16	0	6	3	25
Pamphlet	4	0	2	3	9
Billboard	1	0	8	3	12

The analysis of the findings expressed in Table 4.14 is as follows:

Owing to the fact that the respondents had options when selecting their most preferred media, the numbers do not always add up to the total number of respondents at Sishen. Some of the respondents selected more than one medium as their most preferred.

- 146 (85.86%) of Sishen respondents selected company and clinic workshops as their most preferred media. According to the respondents' statistics, it came up as the 1st most preferred media choice on the list.
- 72 (42.35%) of Sishen respondents selected company training sessions as their most preferred media. According to the respondents' statistics, it came up as the 2nd most preferred media choice on the list.
- 50 (29.41%) of Sishen respondents selected radio as their most preferred medium. According to the respondents' statistics, it came up as the 3rd most preferred media choice on the list.
- 43 (25.29%) of Sishen respondents selected SMS and internet via cell phone as their most preferred media. According to the respondents' statistics, they came up as the 4th most preferred media choice on the list.

- 35 (20.59%) of Sishen respondents selected friends and family as their most preferred medium. According to the respondents' statistics, it came up as the 5th most preferred media choice on the list. Most of the respondents who selected this medium were men, as most women classified it as a not preferred media type.
- 24 (14.12%) of Sishen respondents selected TV as their most preferred medium. According to the respondents' statistics, it came up as the 6th most preferred media choice on the list.
- 16 (9.41%) of Sishen respondents selected newspapers as their most preferred medium. According to the respondents' statistics, it came up as the 7th most preferred media choice on the list.
- 4 (2.35%) of Sishen respondents selected pamphlets as their most preferred medium. According to the respondents' statistics, it came up as the 8th most preferred media choice on the list.
- 1 (0.59%) Sishen respondent selected billboards as their most preferred medium. According to the respondents' statistics, it came up as the least most preferred media choice on the list

4.4.13 THABAZIMBI – MOST PREFERRED LANGUAGE

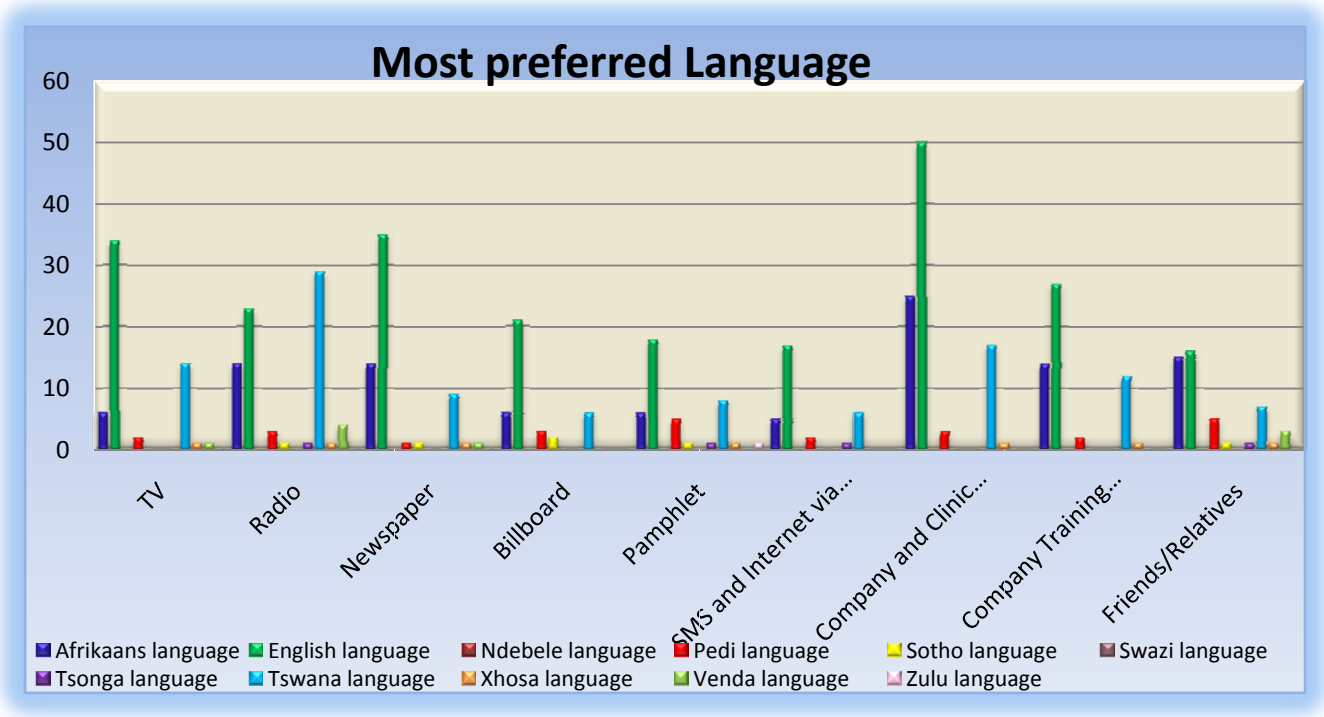

Figure 4.13 Thabazimbi – most preferred language

Table 4.15 Thabazimbi – most preferred language

Media	Afrikaans	English	Sotho-Tswana	Nguni	Venda	Total number of responses
Company and Clinic Workshops	25	50	20	1	0	96
Newspaper	14	35	11	1	1	62
TV	6	34	16	1	1	57
Company Training Sessions	14	27	14	1	0	56
Radio	14	23	33	1	4	75
Billboard	6	21	11	0	0	38
Pamphlet	6	18	14	3	0	41
SMS and Internet via cell phone	5	17	8	1	0	31
Friends/Relatives	15	16	13	2	3	49

4.4.14 RELATIONSHIPS AMONG THE INDIGENOUS PEOPLE OF SOUTH AFRICA

According to SAinfo (2011), the South African population is made up of three broad groupings:

- The Nguni – this category comprises the Zulu, Xhosa, Ndebele, Tsonga and Swazi people.
- The Sotho-Tswana – this category comprises the Southern, Northern and Western Sotho-Tswana people.
- The Venda people.

The Nguni language – Nguni people can understand each other in conversation.

Sotho-Tswana language – Sotho-Tswana people can understand each other in conversation.

The analysis of the findings expressed in Table 4.15 is as follows:

Owing to the fact that the respondents had options when selecting their most preferred media, the numbers do not always add up to the total number of respondents at

Thabazimbi. Some of the respondents selected only one type of medium as their most preferred.

- 50 (50.02%) of Thabazimbi respondents selected English as their most preferred language for company and clinic workshops, 25 (25.51%) selected Afrikaans as their most preferred language for company and clinic workshops, 20 (20.41%) selected Sotho-Tswana as their most preferred language for company and clinic workshops, 1 (1.02%) selected Nguni as their most preferred language for company and clinic workshops. There were no respondents who selected Venda as their most preferred language for company and clinic workshops. According to the respondents' statistics, English was selected as the most preferred language for company and clinic workshops.
- 27 (27.55%) of Thabazimbi respondents selected English as their most preferred language for company training sessions, 14 (14.29%) selected Afrikaans as their most preferred language for company training sessions, 14 (14.29%) selected Sotho-Tswana as their most preferred language for company training sessions, 1 (1.02%) selected Nguni as their most preferred language for company training sessions. There were no respondents who selected Venda as their most preferred language for company training sessions. According to the respondents' statistics, English was selected as the most preferred language for company training sessions.
- 35 (35.71%) of Thabazimbi respondents selected English as their most preferred language for newspaper, 14 (14.29%) selected Afrikaans as their most preferred language for newspaper, 11 (11.22%) selected Sotho-Tswana as their most preferred language for newspaper, 1 (1.02%) selected Nguni as their most preferred language for newspaper. There were no respondents who selected Venda as their most preferred language for newspaper. According to the respondents' statistics, English was selected as the most preferred language for newspaper.
- 33 (33.67%) selected Sotho-Tswana as their most preferred language for radio, 23 (23.47%) of Thabazimbi respondents selected English as their most preferred language for radio, 14 (14.29%) selected Afrikaans as their most preferred language for radio, 4 (4.08%) selected Venda as their most preferred language for radio and 1 (1.02%) selected Nguni as their most preferred language for radio. According to the respondents' statistics, Sotho-Tswana was selected as the most preferred language for radio.

- 34 (34.69%) of Thabazimbi respondents selected English as their most preferred language for TV, 6(6.12%) selected Afrikaans as their most preferred language for TV, 16(16.33%) selected Sotho-Tswana as their most preferred language for TV, 1 (1.02%) selected Nguni as their most preferred language for TV and 1(1.02%) selected Venda as their most preferred language for TV. According to the respondents' statistics, English was selected as the most preferred language for TV.
- 21 (21.43%) of Thabazimbi respondents selected English as their most preferred language for billboards, 11 (11.22%) selected Sotho-Tswana as their most preferred language for billboard, 6 (6.12%) selected Afrikaans as their most preferred language for billboard, there were no respondents who selected Nguni as their most preferred language for billboard and there were no respondents who selected Venda as their most preferred language for billboard. According to the respondents' statistics, English was selected as the most preferred language for billboard.
- 18 (18.37%) of Thabazimbi respondents selected English as their most preferred language for pamphlet, 14 (14.29%) selected Sotho-Tswana as their most preferred language for pamphlet, 6 (6.12%) selected Afrikaans as their most preferred language for pamphlet, 3 (3.06%) selected Nguni as their most preferred language for pamphlet and there were no respondents who selected Venda as their most preferred language for pamphlet. According to the respondents' statistics, English was selected as the most preferred language for pamphlet.
- 16 (16.33%) of Thabazimbi respondents selected English as their most preferred language for friends/relatives, 15 (15.31%) selected Afrikaans as their most preferred language for friends/relatives, 13 (13.27%) selected Sotho-Tswana as their most preferred language for friends/relatives, 3 (3.06%) selected Venda as their most preferred language for friends/relatives and 2 (2.04%) selected Nguni as their most preferred language for friends/relatives. English was selected as the most preferred language for friends/relatives.
- 17 (17.35%) of Thabazimbi respondents selected English as their most preferred language for SMS and Internet via cell phone, 8 (8.16%) selected Sotho-Tswana as their most preferred language for SMS and Internet via cell phone, 5 (5.10%) selected Afrikaans as their most preferred language for SMS and Internet via cell phone, 1 (1.02%) selected Nguni as their most preferred language for SMS and Internet via cell phone and there were no respondents who selected Venda as their

most preferred language for SMS and Internet via cell phone. English was selected as the most preferred language for SMS and Internet via cell phone.

4.4.14 SISHEN – MOST PREFERRED LANGUAGE

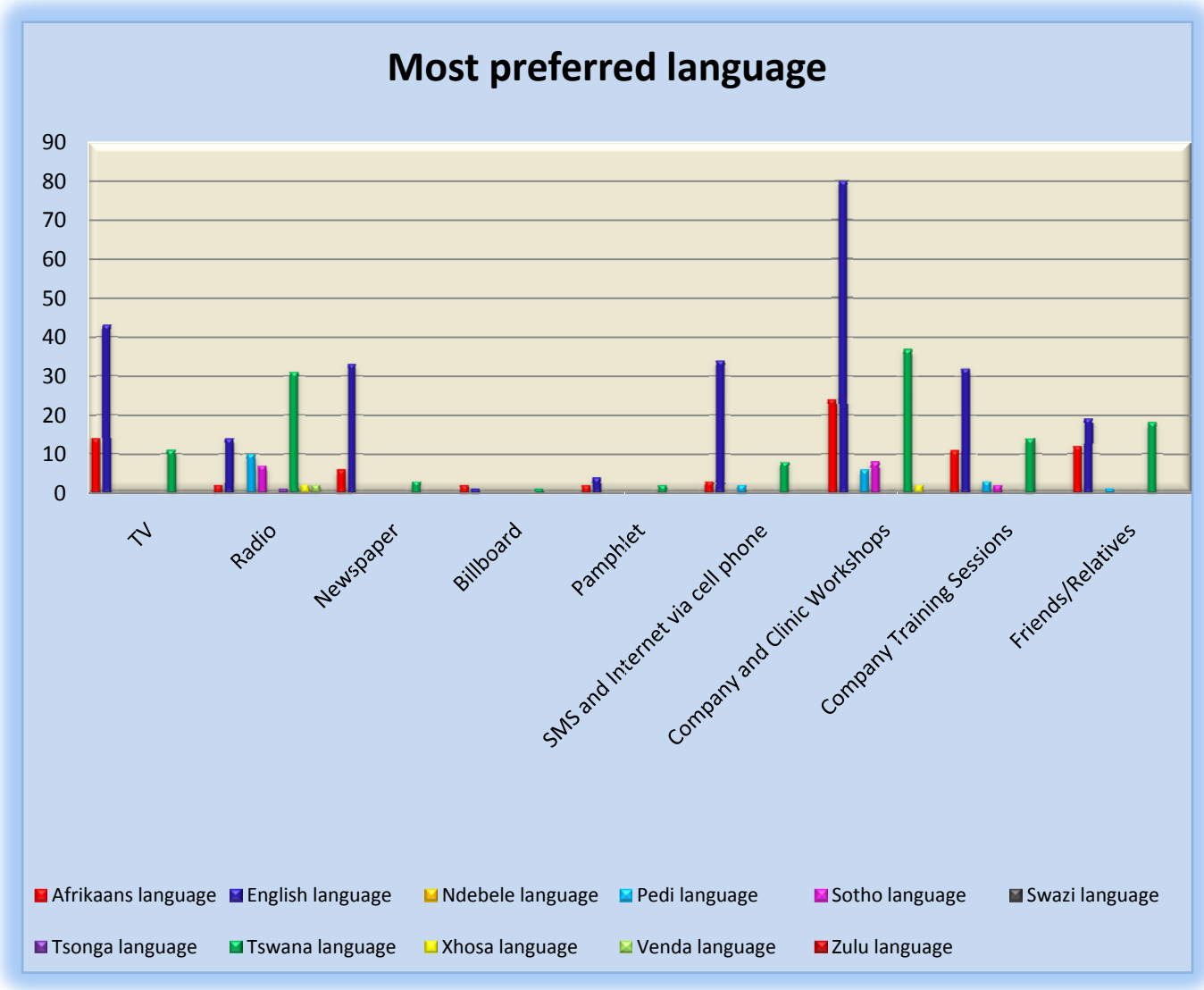

Figure 4.14 Sishen – most preferred language

Table 4.16 Sishen – most preferred language

Media	Afrikaans	English	Sotho-Tswana	Nguni	Venda	Total number of responses
Company and Clinic Workshops	24	80	51	2	0	157
TV	14	43	11	0	0	68
SMS and Internet via cell phone	3	34	10	0	0	37
Newspaper	6	33	3	0	0	42
Company Training Sessions	11	32	19	0	0	62
Friends/Relatives	12	19	19	0	0	50
Radio	2	14	48	3	2	69
Pamphlet	2	4	2	0	0	8
Billboard	2	1	1	0	0	4

The analysis of the findings expressed in Table 4.16 is as follows:

Owing to the fact that the respondents had options when selecting their most preferred media, the numbers do not always add up to the total number of respondents at Sishen. Some of the respondents selected only one medium as their most preferred.

- 80 (47.06%) of Sishen respondents selected English as their most preferred language for company and clinic workshops, 51 (30%) selected Sotho-Tswana as their most preferred language for company and clinic workshops, 24 (14.11%) selected Afrikaans as their most preferred language for company and clinic workshops, 2 (1.18%) selected Nguni as their most preferred language for company and clinic workshops. There were no respondents who selected Venda as their most preferred language for company and clinic workshops. According to the respondents' statistics, English was selected as the most preferred language for company and clinic workshops.
- 32 (18.82%) of Sishen respondents selected English as their most preferred language for company training sessions, 19 (11.18%) selected Sotho-Tswana as their most preferred language for company training sessions, 11 (6.47%) selected

Afrikaans as their most preferred language for company training sessions, there were no respondents who selected Nguni as their most preferred language for company training sessions and there were no respondents who selected Venda as their most preferred language for company training sessions. According to the respondents' statistics, English was selected as the most preferred language for company and training sessions.

- 33 (19.41%) of Sishen respondents selected English as their most preferred language for newspaper, 6(3.53%) selected Afrikaans as their most preferred language for newspaper, 3 (1.76%) selected Sotho-Tswana as their most preferred language for newspaper, there were no respondents who selected Nguni as their most preferred language for newspaper and there were no respondents who selected Venda as their most preferred language for newspaper. According to the respondents' statistics, English was selected as the most preferred language for newspaper.
- 48 (28.24%) selected Sotho-Tswana as their most preferred language for radio, 14 (8.24%) of Sishen respondents selected English as their most preferred language for radio, 3 (1.76%) selected Nguni as their most preferred language for radio, 2 (1.18%) selected Afrikaans as their most preferred language for radio, and 2 (1.18%) selected Venda as their most preferred language for radio. According to the respondents' statistics, Sotho-Tswana was selected as the most preferred language for radio.
- 43 (25.29%) of Sishen respondents selected English as their most preferred language for TV, 14 (8.24%) selected Afrikaans as their most preferred language for TV, 11 (6.47%) selected Sotho-Tswana as their most preferred language for TV, there were no respondents who selected Nguni as their most preferred language for TV and there were no respondents who selected Venda as their most preferred language for TV. According to the respondents' statistics English was selected as the most preferred language for TV.
- 2 (1.18%) selected Afrikaans as their most preferred language for billboard, 1 (0.59%) Sishen respondents selected English as their most preferred language for billboard, 1 (0.59%) selected Sotho-Tswana as their most preferred language for billboard, there were no respondents who selected Nguni as their most preferred language for billboard and there were no respondents who selected Venda as their most preferred language for billboard. According to the respondents' statistics, Afrikaans was selected as the most preferred language for billboard.

- 4 (2.35%) of Sishen respondents selected English as their most preferred language for pamphlet, 2 (1.18%) selected Afrikaans as their most preferred language for pamphlet, 2 (1.18%) selected Sotho-Tswana as their most preferred language for pamphlet, there were no respondents who selected Nguni as their most preferred language for pamphlet and there were no respondents who selected Venda as their most preferred language for pamphlet. According to the respondents' statistics, English was selected as the most preferred language for pamphlet.
- 19 (11.18%) of Sishen respondents selected English as their most preferred language for friends/relatives, 19 (11.18%) selected Sotho-Tswana as their most preferred language for friends/relatives, 12 (7.06%) selected Afrikaans as their most preferred language for friends/relatives, there were no respondents who selected Nguni as their most preferred language for friends/relatives and there were no respondents who selected Venda as their most preferred language for friends/relatives. According to the respondents' statistics, English and Sotho-Tswana were selected as the most preferred languages for friends/relatives.
- 4 (2.35%) of Sishen respondents selected English as their most preferred language for SMS and Internet via cell phone, 2 (1.18%) selected Afrikaans as their most preferred language for SMS and Internet via cell phone, 2 (1.18%) selected Sotho-Tswana as their most preferred language for SMS and Internet via cell phone, there were no respondents who selected Nguni as their most preferred language for SMS and Internet via cell phone and there were no respondents who selected Venda as their most preferred language for SMS and Internet via cell phone. According to the respondents' statistics, English was selected as the most preferred language for SMS and Internet via cell phone.

4.5 KUMBA IRON ORE OVERALL FINDINGS – COMBINED RESULTS FROM THE TWO MINES (SISHEN AND THABAZIMBI)

4.5.1 KUMBA IRON ORE – HIV/AIDS OPINION

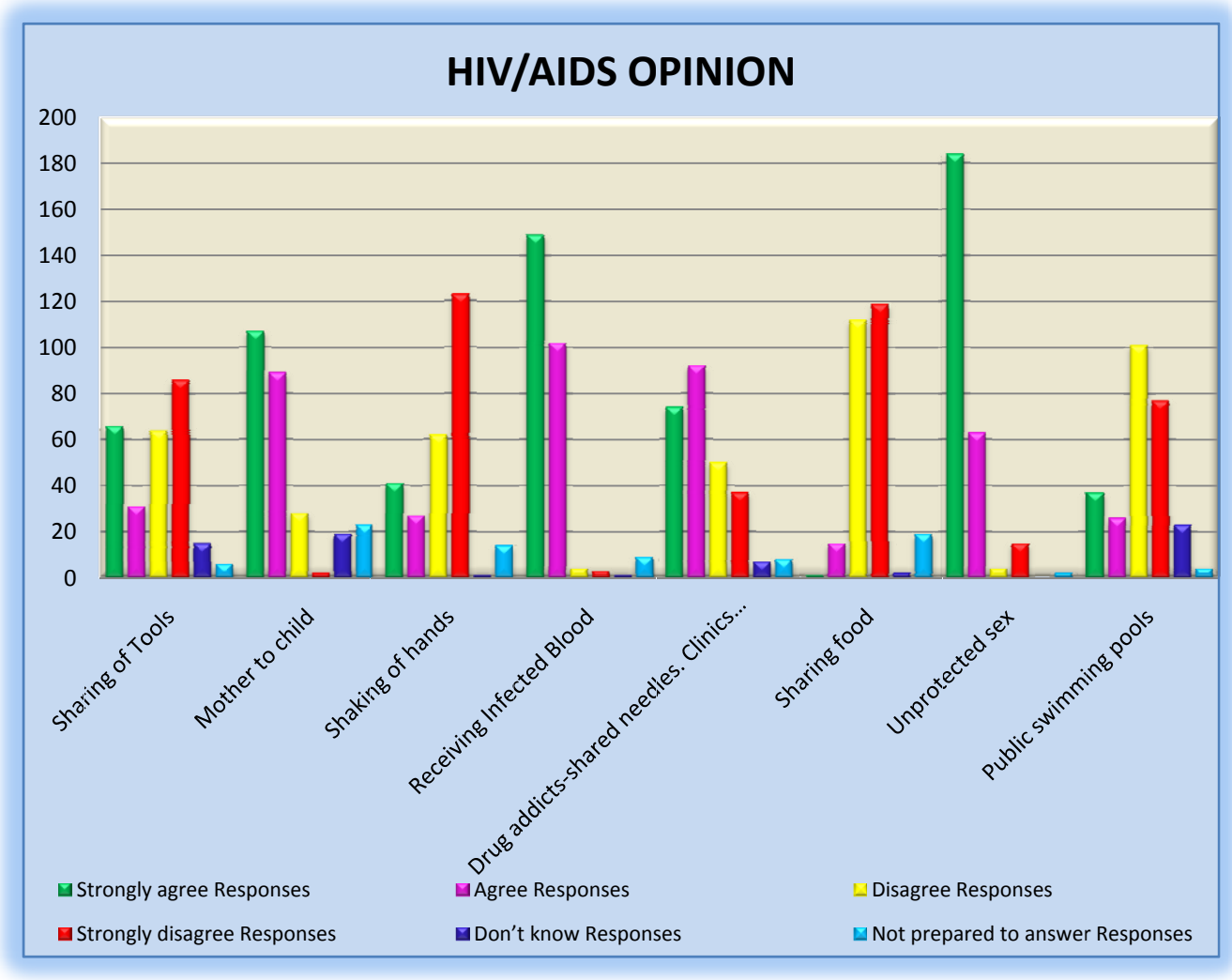

Figure 4.15 Kumba Iron Ore – HIV/AIDS opinion

Table 4.17 Kumba Iron Ore – HIV/AIDS opinion

Opinion	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Not prepared to answer	Total number of responses
Sharing of tools	24.63%	11.57%	23.88%	32.09%	5.60%	2.24%	268
Mother to child	39.93%	33.21%	10.45%	0.75%	7.09%	8.58%	268
Shaking of hands	15.30%	10.07%	23.13%	45.90%	0.37%	5.22%	268
Receiving infected blood	55.60%	38.06%	1.49%	1.12%	0.37%	3.36%	268
Sharing/re-using needles	27.61%	34.33%	18.66%	13.81%	2.61%	2.99%	268
Sharing food	0.37%	5.60%	41.79%	44.40%	0.75%	7.09%	268
Unprotected sex	68.66%	23.51%	1.49%	5.60%	0%	0.75%	268
Public swimming pools	13.81%	9.70%	37.69%	28.73%	8.58%	1.49%	268

The analysis of the findings expressed in Table 4.17 is as follows:

- 36.20% of Kumba Iron Ore respondents believed that you can contract HIV by sharing tools, 55.97% of the respondents did not believe that a person can contract HIV by sharing tools, 5.60% of the respondents did not know if tool-sharing can cause HIV and 2.24% of the respondents were not prepared to answer.
- 73.14% of Kumba Iron Ore respondents believed that HIV can be passed from mother to child, 11.20% of the respondents did not believe that HIV can be passed from mother to child, 7.09% of respondents did not know if HIV can be passed from mother to child and 8.58% of the respondents were not prepared to answer.
- 25.37% of Kumba Iron Ore respondents believed that HIV can be passed on by shaking hands, 69.03% did not believe that HIV can be transmitted by shaking hands, 0.37% of the respondents did not know if shaking of hands can transmit HIV and 5.22% of the respondents were not prepared to answer.
- 93.66% of Kumba Iron Ore respondents believed that receiving infected blood causes HIV, 2.61% of respondents did not believe that receiving infected blood can cause HIV,

0.37% of the respondents did not know if receiving infected blood can cause HIV and 3.36% of the respondents were not prepared to answer.

- 61.94% of Kumba Iron Ore respondents believed that drug addicts sharing needles or clinics where needles are re-used can cause HIV, 32.47% of the respondents did not believe it can cause HIV, 2.61% did not know if it can cause HIV and 2.99% of the respondents were not prepared to answer.
- 5.97% of Kumba Iron Ore respondents believed that sharing of food can cause HIV, 86.19% did not believe that sharing of food can cause HIV, 0.75% of the respondents did not know if sharing of food can cause HIV and 7.09% of the respondents were not prepared to answer.
- 92.17% of Kumba Iron Ore respondents believed that having unprotected sex causes HIV, 7.09% of the respondents did not believe that having unprotected sex can cause HIV, there were no respondents who indicated that they did not know if having unprotected sex can cause HIV and 0.75%of the respondents were not prepared to answer.
- 23.51% of Kumba Iron Ore respondents believed that using public swimming pools causes HIV, 66.42% did not believe that using public swimming pools can cause HIV, 8.58% did not know if using public swimming pools can cause HIV and 1.49% of the respondents were not prepared to answer.

4.5.2 KUMBA IRON ORE – HIV/AIDS PERCEPTIONS

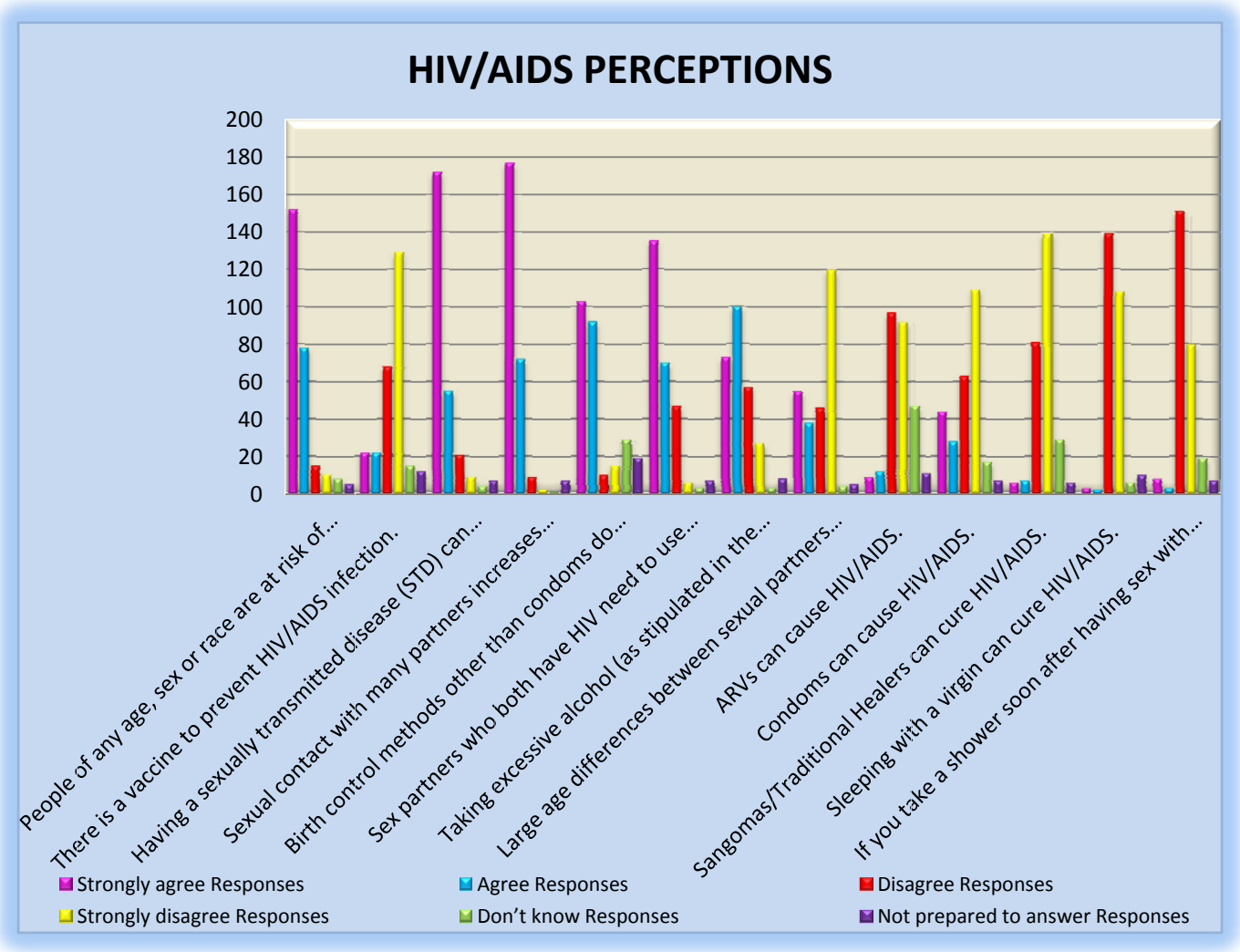

Figure 4.16 Kumba Iron Ore – HIV/AIDS perceptions

Table 4.18 Kumba Iron Ore – HIV/AIDS perceptions

Perception	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Not prepared to answer	Total number of responses
People of any age, sex or race are at risk of getting HIV	56.72%	29.10%	5.60%	3.73%	2.99%	1.87%	268
There is a vaccine to prevent HIV/AIDS infection	8.21%	8.21%	25.37%	48.13%	5.60%	4.48%	268
Having a sexually transmitted disease (STD) can affect one's risk of getting HIV	64.18%	20.52%	7.84%	3.36%	1.49%	3.36%	268
Sexual contact with many partners increases one's risk of getting HIV	66.04%	26.87%	3.36%	0.75%	0.37%	2.61%	268
Birth control methods other than condoms do not reduce the risk of HIV infection	38.43%	34.33%	3.73%	5.60%	10.82 %	7.09%	268
Sex partners who both have HIV need to use condoms	50.37%	26.12%	17.54%	2.24%	1.12%	2.61%	268
Taking excessive alcohol increases one's risk behaviour	27.24%	37.31%	21.27%	10.07%	1.12%	2.99%	268
Large age differences between sexual partners (inter-generational sex) can increase risk of contracting HIV/AIDS	20.52%	14.18%	17.16%	44.78%	1.49%	1.87%	268
ARVs can cause HIV/AIDS	3.36%	4.48%	36.19%	34.33%	17.54 %	4.10%	268
Condoms can cause HIV/AIDS	16.42%	10.45%	23.51%	40.67%	6.34%	2.61%	268
Sangomas/Traditional Healers can cure HIV/AIDS	2.24%	2.61%	30.22%	51.87%	10.82 %	2.24%	268
Sleeping with a virgin can cure HIV/AIDS	1.12%	0.75%	51.87%	40.30%	2.24%	3.73%	268
If you take a shower soon after having sex with an infected person it minimises the risk of HIV infection	2.99%	1.12%	56.34%	29.85%	7.09%	2.61%	268

The analysis of the findings expressed in Table 4.18 is as follows:

- 85.82% of Kumba Iron Ore respondents agreed that people of any age, sex or race are at risk of getting HIV, 9.33% did not agree that people of any age, sex or race are at risk of getting HIV, 2.99% did not know if people of any age, sex or race are at risk of getting HIV and 1.87% were not prepared to answer.
- 16.42% of Kumba Iron Ore respondents agreed that there is a vaccine to prevent HIV/AIDS infection, 73.50% did not agree that there is a vaccine to prevent HIV/AIDS infection, 5.60% of respondents did not know if there is a vaccine to prevent HIV/AIDS infection and 4.48% were not prepared to answer.
- 84.70% of Kumba Iron Ore respondents agreed that having a sexually transmitted disease (STD) can affect one's risk of getting HIV, 11.20% did not agree that having a sexually transmitted disease (STD) can affect one's risk of getting HIV, 1.49% did not know if having a sexually transmitted disease (STD) can affect one's risk of getting HIV and 3.36% were not prepared to answer.
- 92.91% of Kumba Iron Ore respondents agreed that sexual contact with many partners; increases one's risk of getting HIV, 4.11% of respondents did not agree that sexual contact with many partners increases one's risk of getting HIV, 0.37% did not know if sexual contact with many partners increases one's risk of getting HIV and 2.61% were not prepared to answer.
- 72.76% of Kumba Iron Ore respondents agreed that birth control methods other than condoms do not reduce the risk of HIV infection, 9.33% did not agree that birth control methods other than condoms do not reduce the risk of HIV infection, 10.82% did not know if birth control methods other than condoms do not reduce the risk of HIV infection and 7.09% were not prepared to answer.
- 76.49% of Kumba Iron Ore respondents agreed that sex partners who both have HIV need to use condoms, 19.78% did not agree that sex partners who both have HIV need to use condoms, 1.12% did not know if sex partners who both have HIV need to use condoms and 2.61% were not prepared to answer.
- 64.55% of Kumba Iron Ore respondents agreed that taking excessive alcohol increases one's risk behaviour, 31.34% of the Kumba respondents did not agree that taking excessive alcohol increases one's risk behaviour, 1.12% did not know if taking excessive alcohol increases one's risk behaviour and 2.99% were not prepared to answer.

- 34.70% of Kumba Iron Ore respondents agreed that large age differences between sexual partners can increase risk of contracting HIV/AIDS, 61.94% did not agree that large age differences between sexual partners can increase risk of contracting HIV/AIDS, 1.49% did not know if large age differences between sexual partners can increase risk of contracting HIV/AIDS and 1.87% were not prepared to answer.
- 7.84% of Kumba Iron Ore respondents agreed that ARVs can cause HIV/AIDS, 70.52% of the respondents did not agree that ARVs can cause HIV/AIDS, 17.54% did not know if ARVs can cause HIV/AIDS and 4.10% were not prepared to answer.
- 26.87% of Kumba Iron Ore respondents agreed that condoms can cause HIV/AIDS, 64.18% did not agree that condoms can cause HIV/AIDS, 6.34% did not know if condoms can cause HIV/AIDS and 2.61% were not prepared to answer.
- 4.85% of Kumba Iron Ore respondents agreed that sangomas/traditional healers can cure HIV/AIDS, 82.09% did not agree that sangomas/traditional healers can cure HIV/AIDS, 10.82% did not know if sangomas/traditional healers can cure HIV/AIDS and 2.24% were not prepared to answer.
- 1.87% of Kumba Iron Ore respondents agreed that sleeping with a virgin can cure HIV/AIDS, 92.17% did not agree that sleeping with a virgin can cure HIV/AIDS, 2.24% did not know if sleeping with a virgin can cure HIV/AIDS and 3.73% were not prepared to answer.
- 4.11% of Kumba Iron Ore respondents agreed that if you take a shower soon after having sex with an infected person it minimises the risk of HIV infection, 86.19% did not agree that if you take a shower soon after having sex with an infected person it minimises the risk of HIV infection, 7.09% did not know and 2.61% were not prepared to answer.

4.5.3 KUMBA IRON ORE – MOST PREFERRED MEDIA

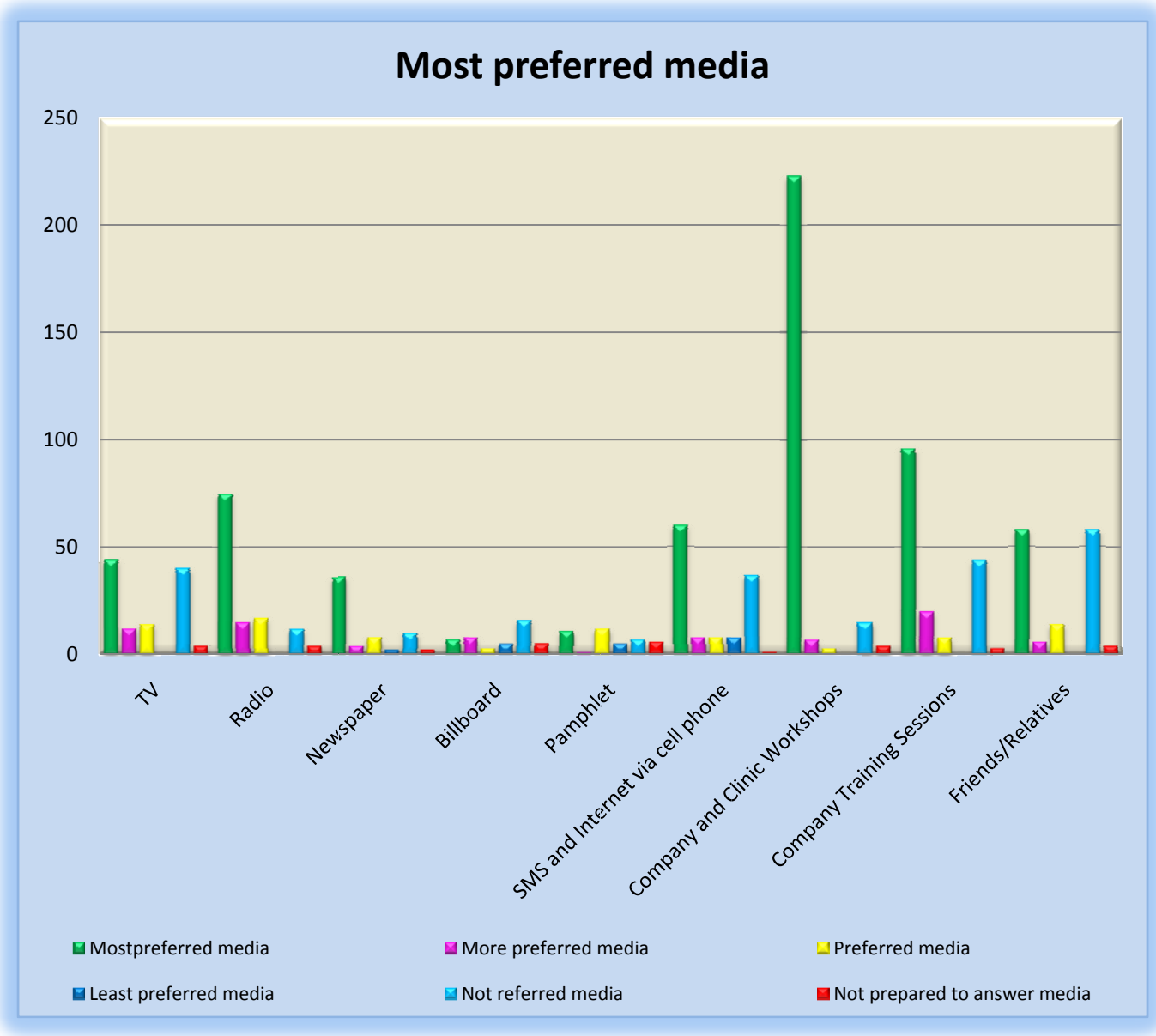

Figure 4.17 Kumba Iron Ore – most preferred media

Table 4.19 Kumba Iron Ore – most preferred media

Media	Most preferred	Preferred	Not Preferred	Not prepared to answer	Total number of responses
Company and Clinic Workshops	230	3	15	4	252
Company Training Sessions	116	8	44	3	171
Radio	90	17	12	4	123
SMS and Internet via cell phone	68	8	45	1	122
Friends/Relatives	64	14	58	4	140
TV	56	14	40	4	114
Newspaper	40	8	10	2	60
Billboard	15	3	21	5	44
Pamphlet	12	12	12	6	42

The analysis of the findings expressed in Table 4.19 is as follows:

Owing to the fact that the respondents had options when selecting their most preferred media, the numbers do not always add up to the total number of respondents at Kumba Iron Ore. Some respondents selected only one medium as their most preferred.

- 230 (85.82%) of Kumba Iron Ore respondents selected company and clinic workshops as their most preferred media. According to the respondents' statistics, it came up as the 1st most preferred media choice.
- 116 (43.28%) of Kumba Iron Ore respondents selected company training sessions as their most preferred media. According to the respondents' statistics it came up as the 2nd most preferred media choice.
- 90 (33.58%) of Kumba Iron Ore respondents selected radio as their most preferred medium. According to the respondents' statistics, it came up as the 3rd most preferred media choice.
- 68 (25.37%) of Kumba Iron Ore respondents selected SMS and internet via cell phone as their most preferred medium. According to the respondents' statistics, it came up as the 4th most preferred media choice.

- 64 (23.88%) of Kumba Iron Ore respondents selected friends/family as their most preferred medium. According to the respondents' statistics, it came up as the 5th most preferred media choice.
- 56 (20.90%) of Kumba Iron Ore respondents selected TV as their most preferred medium. According to the respondents' statistics, it came up as the 6th most preferred media choice.
- 40 (14.93%) of Kumba Iron Ore respondents selected newspaper as their most preferred medium. According to the respondents' statistics, it came up as the 7th most preferred media choice.
- 15 (5.60%) of Kumba Iron Ore respondents selected billboard as their most preferred medium. According to the respondents' statistics, it came up as the 8th most preferred media choice.
- 12 (4.48%) of Kumba respondents selected pamphlet as their most preferred medium. According to the respondents' statistics, it came up as the least 'most preferred' media choice.

4.5.4 KUMBA IRON ORE – MOST PREFERRED LANGUAGE

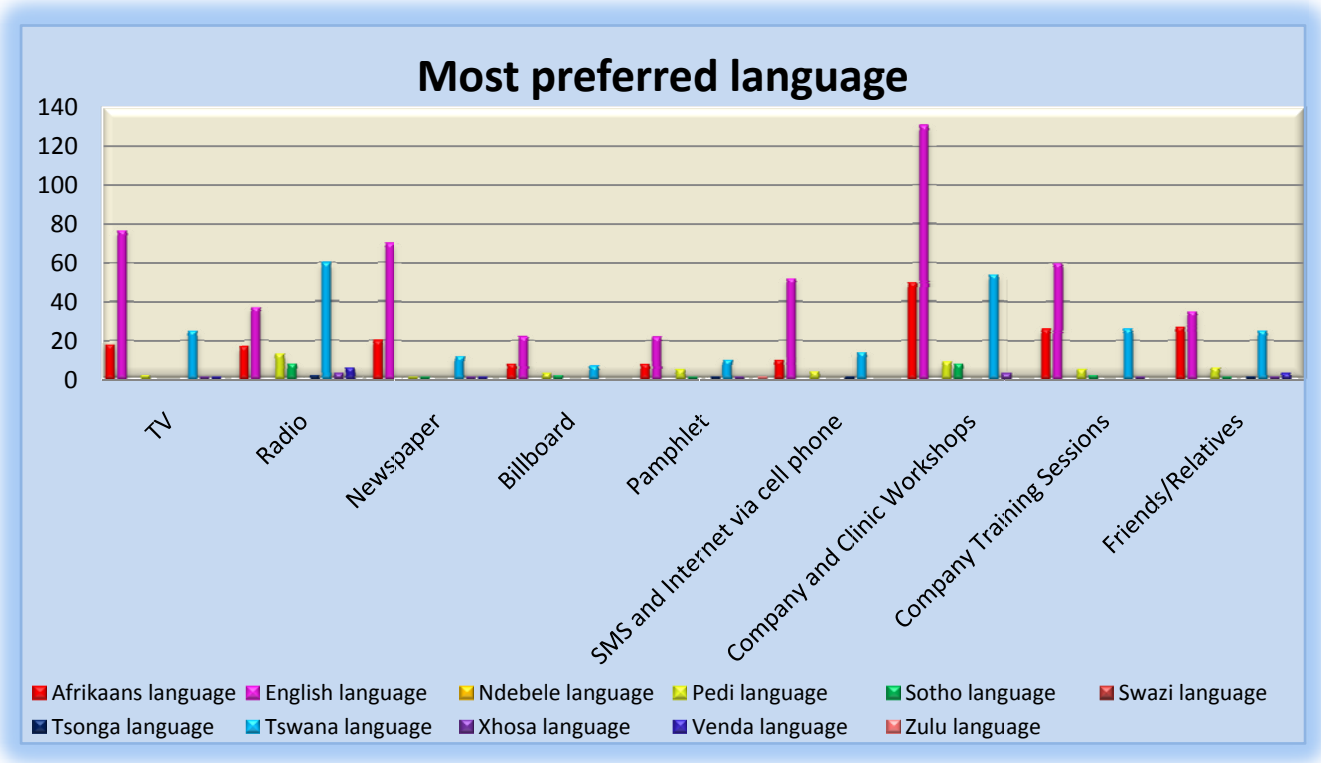

Figure 4.18 Kumba – most preferred media language

Table 4.20 Kumba Iron Ore – most preferred language

Media	Afrikaans	English	Sotho-Tswana	Nguni	Venda	Total number of responses
Company and Clinic Workshops	50	131	71	3	0	255
TV	18	77	27	1	1	124
Newspaper	20	70	14	1	1	106
Company Training Sessions	26	60	33	1	0	120
SMS and Internet via cell phone	10	52	18	1	0	81
Radio	17	37	81	5	6	146
Friends/Relatives	27	35	32	2	3	99
Pamphlet	8	22	16	3	0	49
Billboard	8	22	12	0	0	42

The analysis of the findings expressed in Table 4.20 is as follows:

Owing to the fact that the respondents had options when selecting their most preferred media, the numbers do not always add up to the total number of respondents at Kumba. Some respondents selected only one language and some were selecting more than one language for the same type of media.

- 131 (48.88%) of Kumba Iron Ore respondents selected English as their most preferred language for company and clinic workshops, 71 (26.49%) selected Sotho-Tswana as their most preferred language for company and clinic workshops, 50 (18.66%) selected Afrikaans as their most preferred language for company and clinic workshops, 3 (1.12%) selected Nguni as their most preferred language for company and clinic workshops. There were no respondents who selected Venda as their most preferred language for company and clinic workshops. According to the respondents' statistics, English was selected as the most preferred language for company and clinic workshops.
- 60 (22.39%) of Kumba Iron Ore respondents selected English as their most preferred language for company training sessions, 33 (12.31%) selected Sotho-Tswana as

their most preferred language for company training sessions, 26(9.70%) selected Afrikaans as their most preferred language for company training sessions, 1 (0.37%) selected Nguni as their most preferred language for company training sessions and there were no respondents who selected Venda as their most preferred language for company training sessions. According to the respondents' statistics, English was selected as the most preferred language for company training session.

- 70 (26.12%) of Kumba Iron Ore respondents selected English as their most preferred language for newspaper, 20 (7.46%) selected Afrikaans as their most preferred language for newspaper, 14 (5.22%) selected Sotho-Tswana as their most preferred language for newspaper, 1 (0.37%) selected Nguni as their most preferred language for newspaper and 1 (0.37%) selected Venda as their most preferred language for newspaper. According to the respondents' statistics, English was selected as the most preferred language for newspaper.
- 81 (30.22%) of Kumba Iron Ore respondents selected Sotho-Tswana as their most preferred language for radio, 37 (13.81%) selected English as their most preferred language for radio, 17 (6.34%) selected Afrikaans as their most preferred language for radio, 5 (1.87%) selected Nguni as their most preferred language for radio and 6 (2.24%) selected Venda as their most preferred language for radio. According to the respondents' statistics, Sotho-Tswana was selected as the most preferred language for radio.
- 77 (28.73%) of Kumba Iron Ore respondents selected English as their most preferred language for TV, 27(10.07%) selected Sotho-Tswana as their most preferred language for TV, 18 (6.72%) selected Afrikaans as their most preferred language for TV, 1 (0.37%) selected Nguni as their most preferred language for TV and 1 (0.37%) selected Venda as their most preferred language for TV. According to the respondents' statistics, English was selected as the most preferred language for TV.
- 22 (8.21%) of Kumba Iron Ore respondents selected English as their most preferred language for billboard, 12 (4.48%) selected Sotho-Tswana as their most preferred language for billboard, 8 (2.99%) selected Afrikaans as their most preferred language for billboard, there were no respondents who selected Nguni as their most preferred language for billboard and there were no respondents who selected Venda as their most preferred language for billboard. According to the respondents' statistics, English was selected as the most preferred language for billboard.

- 22 (8.22%) of Kumba Iron Ore respondents selected English as their most preferred language for pamphlet, 16 (5.97%) selected Sotho-Tswana as their most preferred language for pamphlet, 8 (2.99%) selected Afrikaans as their most preferred language for pamphlet, 3 (1.12%) selected Nguni as their most preferred language for pamphlet and there were no respondents who selected Venda as their most preferred language for pamphlet. According to the respondents' statistics, English was selected as the most preferred language for pamphlet.
- 35 (13.06%) of Kumba Iron Ore respondents selected English as their most preferred language for friends/relatives, 32 (11.94%) selected Sotho-Tswana as their most preferred language for friends/relatives, 27 (10.07%) selected Afrikaans as their most preferred language for friends/relatives, 3 (1.12%) selected Venda as their most preferred language for friends/relatives and 2 (0.75%) selected Nguni as their most preferred language for friends/relatives. According to the respondents' statistics, English was selected as the most preferred language for friends/relatives.
- 52 (19.40%) of Kumba Iron Ore respondents selected English as their most preferred language for SMS and Internet via cell phone, 18 (6.75%) selected Sotho-Tswana as their most preferred language for SMS and Internet via cell phone, 10(3.37%) selected Afrikaans as their most preferred language for SMS and Internet via cell phone, 1 (0.37%) selected Nguni as their most preferred language for SMS and Internet via cell phone and there were no respondents who selected Venda as their most preferred language for SMS and Internet via cell phone. According to the respondents' statistics, English was selected as the most preferred language for SMS and Internet via cell phone media.

4.6 DISCUSSION

Thabazimbi had the higher response rate compared to Sishen although both response rates were good. It was found in this study that company and clinic workshops were the most preferred media for receiving HIV/AIDS information. Company training sessions and radio came up as the 2nd and 3rd most preferred media respectively. Radio came up as the only medium where respondents preferred it in their mother language and a pamphlet was the least preferred medium.

English was the most preferred language for all the media types except radio where Tswana-Sotho was the most preferred language. According to the respondents'

statistics, it was noted that more men prefer discussions on HIV/AIDS with friends/family compared to women. Most women indicated that they did not like discussions on HIV/AIDS with friends/family.

Overall, results from the study demonstrated that the majority of unskilled Kumba Iron Ore employees in this study had a fair level of HIV knowledge, and there was no significant percentage difference between the two mines with regard to marital status in relation to HIV/AIDS knowledge. Most respondents, who indicated that they had sound HIV/AIDS knowledge and were very aware of HIV/AIDS, were married. However, there was a significant percentage difference between the two mines with regard to type of dwelling in relation to HIV/AIDS knowledge. At Thabazimbi, people who live in company houses, company hostels and their own houses indicated that they were aware and had sound HIV/AIDS knowledge, whereas, at Sishen, people who live in company houses, company hostels, own houses and other, indicated that they were aware and had sound HIV/AIDS knowledge. People who live in company hostels, other and those who were not prepared to reveal where they live at Thabazimbi, indicated that they had only heard of HIV/AIDS, whereas, people who live in company hostels and other at Sishen, indicated that they had only heard of HIV/AIDS. This means that these people don't know how the disease is transmitted or how it can be prevented. There was one person at Thabazimbi who lives in the other type of dwelling who indicated that he/she doesn't know about HIV/AIDS.

The areas that need attention are HIV/AIDS awareness and information about HIV/AIDS transmission and prevention. It was noted in the findings that as many as 41.83% of Thabazimbi and 31.77% of Sishen respondents (36.20% of the two combined mines – Kumba Iron Ore respondents) believed that HIV/AIDS can be transmitted by sharing tools. 35.71% of Thabazimbi and 19.41% of Sishen respondents (25.37% of the two combined mines – Kumba Iron Ore respondents) believed that HIV/AIDS can be transmitted by shaking hands. 32.94% of Sishen respondents and 31.63% of Thabazimbi respondents (32.47% of the two combined mines – Kumba Iron Ore respondents) believed that drug addicts sharing needles or clinics where there are not enough needles to go around and needles are re-used would not cause HIV/AIDS. 26.53% of Thabazimbi respondents and 21.77% of Sishen respondents (23.51% of the two combined mines – Kumba Iron Ore respondents) believed that using public swimming pools can cause HIV/AIDS. 25.51% of Thabazimbi respondents and 11.18%

of Sishen respondents (16.42% of the two combined mines – Kumba Iron Ore respondents) believed that there is a vaccine to prevent HIV/AIDS. 34.71% of Sishen respondents and 25.51% of Thabazimbi respondents (31.34% of the two combined mines – Kumba Iron Ore respondents) did not believe that taking excessive alcohol can increase risk behaviour. 64.71% of Sishen respondents and 57.14% of Thabazimbi respondents (61.94% of the two combined mines – Kumba Iron Ore respondents) did not believe that large age differences between sexual partners can increase the risk of contracting HIV/AIDS. 18.36% of Thabazimbi respondents and 1.76% of Sishen respondents (7.84% of the two combined mines – Kumba Iron Ore respondents) believed that ARV causes HIV/AIDS. 28.23% of Sishen respondents and 24.49% of Thabazimbi respondents (26.87% of the two combined mines – Kumba Iron Ore respondents) believed that condoms cause HIV/AIDS. 16.05% of the respondents lacked understanding about the relationship between sexually transmitted diseases (STDs) and increased HIV transmission.

4.7 ANECDOTAL COMMENTS

There was no provision for comments on the questionnaire but some respondents wrote comments. These comments provided more insight on HIV/AIDS knowledge among the target group. The respondents' remarks are summarised in Table 4.21

Table 4.21 Anecdotal questionnaire comments

Questions	Comments
Sharing of tools	The other person might have cuts on his/her hands and wants to use a colleague's tools and leave his infected blood on those tools
Public swimming pools	What if the other swimmers are having their monthly menstrual periods – what will happen to that blood in the swimming pool
Sex partners who both have HIV need to use condoms	There is no need of condoms since they are already having the disease
Condoms can cause HIV/AIDS	If a condom is disposed of incorrectly and children find it and play with it – this causes HIV/AIDS if the partners have the disease
If you take a shower soon after having sex with an infected person it minimises the risk of HIV infection	A respondent asked the researcher to ask Jacob Zuma
Company and Clinic Workshops	Some respondents commented that they want company and clinic workshops because it will make them feel great and honoured by the company like managers where food and drinks will be provided during workshops
Friends/Relatives	Some female respondents said they don't want to talk about HIV/AIDS issues to friends or relatives in case you are HIV positive or your relative is positive, because they gossip a lot and the whole community will end up knowing

The analysis of the findings expressed in Table 4.21 is as follows:

A closed questionnaire was used in the study. These comments were translated from Tswana to English by Mooketsi Mocumi who helped to translate the English questionnaire to the Tswana questionnaire.

On the sharing of tools question, the comments from respondents indicated that some respondents were not well informed about the life span of the HI virus outside the human body. If the user of a tool has an injury and is bleeding and he/she is infected, then another person may be exposed to the virus via the infected blood within at most 20 minutes of the blood getting on to the tool in question the answer will be in affirmative. However, there is no risk after 20 minutes because the HI virus does not live beyond 20 minutes outside the human body (TheBody.com, 2011).

On the public swimming comment, respondents are not well informed about chemicals used in pools which assist to eradicate germs and viruses in water. Again the dilution of the blood in the pool will not render any harm to the other swimmers.

The comment made on the question, if you take a shower soon after having sex with an infected person, it minimises the risk of HIV infection, is an indication that leaders must be very careful of what they say regardless of the circumstances, because their comments can have far-reaching consequences. This comment emanated from the statement by Jacob Zuma (the current SA president) in 2006 during his rape trial. Despite the fact that most respondents stated that it does not minimise the risk of HIV infection, there were a few respondents who believed that having a shower minimises the risk of contracting HIV/AIDS. Kumba Iron Ore has a zero harm philosophy for its safety strategy and that strategy is also driven by the motto of “one death is too many”. Respondents who believe that taking a shower minimises the risk of HIV infection must be a concern to Kumba Iron Ore management.

Comments on the question whether sex partners who both have HIV need to use condoms also showed that the respondents were not well informed about HI virus load and HIV types in each infected person. They didn’t consider HI virus re-infection if a person sleeps with an infected person without using a condom, even if the person is already positive. This can even render an individual’s medication useless if the other person has a higher virus load and is carrying a different virus.

Comments that if a condom is disposed of incorrectly and children find it and play with it causes HIV/AIDS if the partners have the disease is positive evidence that some people are using condoms and there is a need to educate them more on appropriate condom disposal and about the life span of HI virus outside the human body.

Comments about company and clinic workshops showed that the respondents want to convey a message to Kumba Iron Ore management about wanting to be valued workers. The respondents showed that they are willing to learn more about HIV/AIDS in an environment where food and drinks are offered by the company.

Comments on friends and relatives showed that separating women from men in workshops or having a closed box for comments and suggestions will help to get more out of women than mixing them with men. Most women indicated that they are not willing to talk openly about HIV/AIDS but they are willing to receive more information about it. The respondents were thinking “out of the box” and their comments will assist in finding a starting point to meet information needs for Kumba Iron Ore employees.

4.8 CHAPTER SUMMARY

All the research findings were captured and summarised. The findings were summarised according to mining site and a summary of the two mines combined (Kumba Iron Ore) was also given. Graphs and tables were used to display different figures and percentages of the findings. A detailed discussion was presented and anecdotal evidence from the research findings was also summarised in a table. The detailed discussion assisted in formulating research recommendations for implementation by Kumba Iron Ore management.

CHAPTER 5: RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

Recommendations from the research findings will be put forward in this chapter. The fight against HIV/AIDS in Kumba Iron Ore needs to be tackled by all stakeholders. Stakeholders such as Kumba Iron Ore management, health workers and local government must come together and find a means of fighting the disease and ways of preventing it within the company and the surrounding villages. Kumba Iron Ore must disseminate relevant HIV/AIDS information to its employees and the surrounding villages in order to close the HIV/AIDS knowledge gap which was identified in the findings.

5.2 STUDIED LITERATURE

The literature was studied and compared with the goals of this research in order to find some similarities and gaps. There was no similar project found in the reviewed literature which investigated any work relating to HIV/AIDS information dissemination in the mining sector in South Africa or a related project which aimed to solve similar problems or adopted similar solutions. While none of the reviewed literature was related to HIV/AIDS information dissemination to unskilled mining employees, aspects of it were similar to this project's goals, and as such provided the researcher with valuable insight on how to approach this research. The majority of the literature found explained what information and information behaviour is. The literature studied defined the relation between information needs and information seeking and also the relationship between information dissemination and information use. The literature studied assisted the researcher in finding an appropriate research methodology for this study. Some literature studied presented ways of conveying basic knowledge about the HIV/AIDS disease and how to prevent it.

5.3 RECOMMENDATIONS

Kumba Iron Ore must embrace communication channels beyond an electronic interface in fighting against the HIV/AIDS disease especially when disseminating HIV/AIDS information to the unskilled employees of the company and any volunteers from the surrounding villages. According to Wilson and Kaplan (2000) "electronic health records

and care management systems can improve support but physical interventions are needed to support adoption". In other words, human interaction is needed to achieve the required results. The accuracy and relevance of the information communicated and disseminated is vital and must be readily available to all. As long as the people that need the information do not receive it in their preferred media and language, the information will be useless. Misconceptions on HIV/AIDS perceptions circulating in the company and surrounding villages will continue and the fight against HIV/AIDS will never be won.

Company and clinic workshops came up as the first preferred media in the findings. It is recommended that Kumba Iron Ore establish a campaign for HIV/AIDS awareness at all its mines. This can be achieved by setting up company and clinic workshops which must be open to all employees and any volunteers from the surrounding villages. The workshops must be conducted in employees' preferred languages. The facilitators must be fluent in the languages of choice in the workshops. The facilitators must be knowledgeable about the HIV/AIDS issues so as to accurately respond to attendees' questions and to be able to positively change the misperceptions of attendees. It is recommended that Kumba Iron Ore hires outside facilitators so that attendees can freely discuss the HIV/AIDS issues. It is recommended that Kumba Iron Ore develop interactive workshops or sessions to make it interesting in order to attract employees to attend more than once.

Company training sessions came up as the second most preferred media choice. Kumba Iron Ore must set up company training sessions at its mines which must be attended by its employees and volunteers from the surrounding villages. The training sessions must also be conducted in the attendees' preferred language. This may also assist in positively changing some of the negative HIV/AIDS opinions, perceptions and lack of HIV/AIDS knowledge which were identified in the findings of this research.

It was clearly identified from the findings that most women did not like to discuss HIV/AIDS issues with friends or relatives. It is recommended that when the company conducts the workshops and training sessions it should set up a system which allows attendees to provide anonymous contributions or questions, in order to get more out of those employees or villagers who are not keen to discuss HIV/AIDS issues publicly. It would be a good idea to set up a "closed box" mechanism where participants can write

questions or any suggestions and drop them in the sealed box. This would allow the facilitator to get the opinions, perceptions or questions from all attendees. This will also assist in allaying fears of victimisation.

Radio emerged as the third most preferred media choice. Kumba Iron Ore can also utilise the company radio station as well as local radio to disseminate HIV/AIDS information. For example, Kumba Iron Ore can air HIV/AIDS information advertisements on different radio stations in various languages.

Kumba Iron Ore must gather and disseminate accurate information about HIV/AIDS so as to positively change the current perceptions at the mines. It came out in the study that some employees believe that sharing tools, shaking hands and sharing of food can cause HIV/AIDS. Some respondents believed that having unprotected sex cannot cause HIV/AIDS, while others felt that using public swimming pools causes HIV. Some did not agree that people of any age, sex or race are at risk of getting HIV. Others felt that there is a vaccine to prevent HIV/AIDS infection. There were respondents who felt that sex partners who both have HIV don't need to use condoms, or that large age differences between sexual partners cannot increase the risk of contracting HIV/AIDS. Others felt that ARVs and condoms can cause HIV/AIDS. Some respondents agreed that if you take a shower soon after having sex with an infected person, it minimises the risk of HIV infection. The myth surrounding HIV/AIDS must be dispelled and employees need to develop a sound knowledge of the disease, its causes and ways to prevent it.

5.4 FUTURE WORK

I suggest that the workshops, information sessions and radio advertisements be implemented and a follow-up survey be conducted after twelve months. In this way any changes in knowledge and perception can be measured. This needs to be an on-going campaign with regular follow-up surveys as there will always be new employees in the company. The expansion of the project is beyond the scope of this study.

5.5 CONCLUSION

All respondents showed that they are eager to receive more information about HIV/AIDS as long as the environment is conducive to do so. This was evident by the written comments on the questionnaire by some of the respondents. Kumba Iron Ore mostly use online surveys which eliminate most of the target group (unskilled employees) because of their limited computer access. In future, Kumba Iron Ore should include hard-copies of the questionnaires when doing surveys in order to accommodate all employees.

It is important for Kumba Iron Ore to have HIV prevention and awareness campaigns to focus not only on sound HIV knowledge but also on developing and maintaining safe sexual behaviour, positively changing the existing HIV/AIDS negative perceptions and for employees to understand the company and country's HIV/AIDS policies. Kumba Iron Ore must work closely with government. The government must focus on encouraging adequate HIV/AIDS knowledge among health workers near the mines and ensuring that the local government leaders are involved. Having a broader understanding of HIV policies among general village members might encourage more Kumba Iron Ore employees to seek HIV testing, as they would understand and realise that HIV/AIDS knowledge is essential. In other words, they will know where to get treatment and counselling if needed. All in all, they will know that having HIV/AIDS or being affected by HIV/AIDS will not mean a death sentence or losing one's job.

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APPENDICES

APPENDIX

- Kumba research permission approved memo.
- Supervisor approval letter
- University of Pretoria Ethics Committee approval letter
- Research declaration form
- Informed consent form
- English letter to participating colleagues
- The English questionnaire
- Tswana letter and questionnaire to participating colleagues
- Sishen mine – results findings
- Thabazimbi mine – results findings
- Kumba (Sishen and Thabazimbi) – results findings

AngloAmerican

IRON ORE
KUMBA IRON ORE LTD

MEMO

To Human Resource Management
From Susan Sithole
Date 15/04/2011
Subject Request to do M.IT research survey within Anglo American Kumba Iron Ore

1. Purpose

This is a request for permission to do a study within Anglo American Kumba Iron Ore for my Masters in Information Technology dissertation.

2. Background

I am currently doing my final year at the University of Pretoria and I must do a dissertation to obtain my qualification. The study is entitled "***The impact of communication and dissemination of information in influencing HIV/AIDS awareness and prevention***". The research aims to establish which types of communication/dissemination channels can be used to reach unskilled employees within the company.

HIV/AIDS Practices

The underlying assumption is that dissemination of appropriate information can influence positive behaviour change with respect to HIV/AIDS amongst the unskilled employees.

3. RESEARCH METHODOLOGY

The unskilled employees will be the subjects of the investigation. The sample will be of all the unskilled employees who are classified as EBET 1 as per company classification; who work at the sites either permanently or on contract basis. The size of the population is about 1 650 employees as of 25 March 2011.

The questionnaire will be divided into three sections:

1. Background information of participants
2. Participants' opinion regarding transmission of HIV/AIDS
3. Information dissemination preferences

AngloAmerican

The method that will be used to collect data is a printed questionnaire because the participants have limited internet access. They will fill in the questionnaire alone to ensure anonymity and participation is **voluntary.**

The steps that will be followed are:

a. Translate questions to Tswana language and print the questions out.
b. Sensitise sample units of questionnaire, explaining intend of the questionnaire, the value it would add to the organisation and academic community, and how long it will take to complete the questionnaire.
c. Distribute questionnaires via shift supervisors
d. Visit the site after two weeks to find out progress of the questionnaires and thank those that have completed the questionnaire.
e. Capture data accordingly.

3. Recommendation

Based on the above, I request permission to do my research within Anglo American Kumba Iron Ore and help the Safety and Health department to evaluate the impact of communication and dissemination of information in influencing HIV/AIDS awareness and prevention in the company.

SUSAN SITHOLE

APPROVED / ~~NOT APPROVED:~~

Head of Talent Management and Learning

2011-06-02

Date

27 September 2011

Submission of MIT Questionnaire for approval by the
EBIT Ethics Committee

Name: Susan Sithole

Student No.:10560387

Degree: MIT

Supervisor: Lisa Thompson

Topic:

The impact of communication and dissemination of information in influencing HIV/AIDS awareness and prevention in South African mining industry with reference to Anglo American Kumba Iron Ore Ltd

The candidate, Susan Sithole, has put together a questionnaire aiming to establish the preferred media that can be used to disseminate HIV/AIDS information to the unskilled workers classified as EBET 1 by the organisation.

The sample will be drawn from the workers who attend the Mine Health and Safety Clinics where they are regularly tested for dust levels in their lungs and hearing exclusively.

She has the support and go-ahead from Kumba Iron Ore (see supporting documentation) and professional translators who regularly translate questionnaires into the appropriate languages for Kumba Iron Ore.

She has addressed the ethical issues regarding the demographics of the respondents which will be included in Chapter 3.

The questionnaire has been approved by the Research Committee of the Department of Information Science as well as by the supervisor.

All relevant documents are attached

Thank you,

Lisa Thompson

Lisa Thompson
Information Science
IT 6-42

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Fax +27 (0)12 362-5181
e-mail: lisa.thompson@up.ac.za

Sithole, Susan

From: Mari Ferreira [Mari.Ferreira@up.ac.za]
Sent: 17 November 2011 11:06 AM
To: Sithole, Susan
Subject: Ethics committee: Approval (S Sithole)

Susan

Your ethics application has been approved. The approval letter will reach you by post.

Regards

Mari Ferreira
Secretary: Prof GP Hancke
Department of Electrical, Electronic and Computer Engineering
University of Pretoria
Tel. +27 12 420 3736
Fax. +27 12 362 5000

>>> "Sithole, Susan" <susan.sithole@angloamerican.com> 9/30/2011 3:12 PM >>>
Good day Mrs Ferreira

Please find attached my dissertation documents re-submission for the EBIT ethics committee approval.

Best regards

Susan Sithole
Information Systems Manager

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RESEARCHER DECLARATION

I, Susan Sithole (Student No.10560387) in my capacity as Masters in Information Technology researcher at the University of Pretoria, declare that:

1 Research subjects will be informed, information will be handled confidentially, research subjects reserve the right to choose whether to participate and, where applicable, written permission has be obtained for the execution of the project from the company (permission attached).

2 No conflict of interests or financial benefit, whether for the researcher, company or organisation, that could materially affect the outcome of the investigation or jeopardise the name of the university is foreseen.

3 Inspection of the experiments in loco may take place at any time by the committee or its proxy.

4 The information I furnish in the application is correct to the best of my knowledge and that I will abide by the stipulations of the committee as contained in the regulations.

5 Signed: _____ Date: 25/05/2011

Informed consent form

1 The impact of communication and dissemination of information in influencing HIV/AIDS awareness and prevention

2 I …… ……..hereby voluntarily grant my permission for participation in the project as explained to me by ……..

3 The nature, objective, possible safety and health implications have been explained to me and I understand them.

4 I understand my right to choose whether to participate in the project and that the information furnished will be handled confidentially. I am aware that the results of the investigation may be used for the purposes of publication.

6 Upon signature of this form, you will be provided with a copy.

Signed: _____ Date: _____

Witness: _____ Date: _____

Researcher: _____ Date: _____

Dear Colleague,

Personal opinion regarding transmission of HIV/AIDS and media preference

Attached is a questionnaire which forms part of the research I am conducting on behalf of Anglo American Kumba Iron Ore limited through the University of Pretoria. The research is conducted under the supervision of Ms. Lisa Thompson of University of Pretoria.
The aim of the research is to obtain your opinion regarding HIV/AIDS transmission, prevention and your language and media preference.

Your anonymity is guaranteed and please don't write your name, e-mail address or employee number when filling in the questionnaire. It will take about 20 minutes of your time to complete the questionnaire and participation is **voluntary**. It would be appreciated if you would complete and submit the questionnaire back by the **15th of December 2011**.

Thanking you in advance

Susan Sithole

083 376 2376
Susan.Sithole@angloamerican.com

THE QUESTIONNAIRE

SECTION 1:

This section covers the background information. The gathered information will be analysed in a group basis not on an individual analysis so as to ensure the participants' privacy.

BACKGROUND INFORMATION

Please select the relevant option.

1. Gender.

Male	Female	Not prepared to answer

2. Marital status

Single	Married	Widow/Widower	Separated	Live-together	Not prepared to answer

3. Home/Mother language

Tswana	Zulu	Pedi	Sotho	Tsonga	Xhosa	Venda	Afrikaans	English	Swazi	Ndebele

4. Mining site

Sishen	Thabazimbi	Not prepared to answer

5. Type of dwelling

Company house	Company hostel	Own house	Other	Not prepared to answer

SECTION 2:

This section covers statements relating to HIV/AIDS information dissemination, knowledge, attitude, behaviour and perceptions.

1. To what extent are you aware of the HIV/AIDS disease?

Sound knowledge	Aware	Only heard of it	Don't know	Not prepared to answer

2. To what extent do you agree with the following statements?

The most common ways of the HIV transmission are:

	Strongly Agree	Agree	Disagree	Strongly disagree	Don't know	Not prepared to answer
	5	4	3	2	1	0
Sharing tools.						
Mother to child.						
Shaking hands.						
Receiving infected blood.						
Drug addicts- shared needles. Clinics where there are not enough needles to go around.						
Sharing food.						
Unprotected sex.						
Public swimming pools.						

3. To what extent do you agree with the following statements?

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Not prepared to answer
	5	4	3	2	1	0
People of any age, sex or race are at risk of getting HIV.						
There is a vaccine to prevent HIV/AIDS infection.						
Having a sexually transmitted disease (STD) can affect one's risk of getting HIV.						
Sexual contact with many partners increases one's risk of getting HIV.						
Birth control methods other than condoms do not reduce the risk of HIV infection.						
Sex partners who both have HIV need to use condoms.						
Taking excessive alcohol (as stipulated in the company's safety & health policy of more than 3mg of alcohol in blood) increases one's risk behaviour.						
Large age differences between sexual partners (inter-generational sex) can increase risk of contracting HIV/AIDS.						
ARVs can cause HIV/AIDS.						
Condoms can cause HIV/AIDS.						
Sangoma/Traditional healers can cure HIV/AIDS.						
Sleeping with a virgin can cure HIV/AIDS.						
If you take a shower soon after having sex with an infected person it minimises the risk of HIV infection.						

4. Select the media which you prefer to get HIV/AIDS information from.

Media Preference

	Most preferred	More preferred	Preferred	Least preferred	Not preferred	Not prepared to answer
	5	4	3	2	1	0
TV						
Radio						
Newspaper						
Billboard						
Pamphlet						
SMS and Internet via cell phone						
Company and Clinic workshops						
Company training sessions						
Friends/Relatives						

5. Select the language(s) you prefer the media to be.

Media Language preference

	Tswana	Zulu	Pedi	Sotho	Tsonga	Xhosa	Venda	Afrikaans	English	Swazi	Ndebele
TV											
Radio											
Newspaper											
Billboard											
Pamphlet											
SMS and Internet via cell phone											
Company and Clinic workshops											
Company training sessions											
Friends/Relatives											

Thank you for your participation

Modiri ka nna yo o rategang,

Kakanyo ya gago mabapi le go anama ga HIV/AIDS le go tlhotlhomisa gore o rata tshedimosetso e ka phatlaladiwa ka mokgwa o feng

Dipotso tseno ke karolo ya tlhotlhomiso e ke e dirang mo boemong jwa Anglo American Kumba Iron Ore Limited ka thuso ya University ya Pretoria. Tlhotlhomiso kgotsa patlisiso eno e dirwa mo tlase ga kelotlhoko ya ga Mme Lisa Thompson wa University ya Pretoria.
Maitlhomo ka tlhotlhomiso eno ke go utlwa kakanyo ya gago mabapi le go anama ga HIV/AIDS le go utlwa gore o rata tshedimosetso e ka phasaladiwa ka mokgwa ofeng.

Re go tshepisa gore leina la gago ga lena go itsiwi ka gope mme cweecwee re dira boikuelo mo go wena gore o seka wa kwala leina la gago, e-mail kgotsa nomoro ya gago ya tiro fa o araba dipotso tse di tla latelang. Seno se tla tsaya fela metsotso e 20 ya nako ya gago mme go tsewa karolo ka go **ithaopa**. Re ka leboga thata fa o ka tlatsa foromo eno ya dipotso le go ikhutlisetsa morago pele ga **25 November 2011**.

Re a leboga.

Susan Sithole
083 376 2376
Susan.sithole@angloamerican.com

Karolo 1:

Tshedimosetso e e kopiwang fa tlase e tla dirisetswa fela go ka tshwantshanya ditlhopha mme eseng mabaka a motho a le mong.

Lemorago la tshedimosetso

Cwee-cwee tlhopha karabo e e siameng.

1. Bong.

Monna	Mosadi

2. Kemo ya nyalo

Ga kena molekane	Ke nyetswe	Motlholagadi/Moswagadi	Re kgaogane	Re dudisana mmogo kwa ntleng ga nyalo

3. Puo e o e ratang

Tswana	Zulu	Pedi	Sotho	Tsonga	Xhosa	Venda	Afrikaans	English	E nngwe

4. Lefelo la tiro

Sishen	Thabazimbi

5. Lefelo la tolo

Ntlo ya tilo	“Hostel”	Ntlo ya gago	Felo gogwe	Ga ke batle go araba

KAROLO 2:

Karolo eno e akaretsa dintlha mabapi le phasalatso ya tshedimosetso ka HIV/AIDS, kitso, maitsholo, maitseo le dikakanyetso.

1. O itsi ka botlhoko jwa HIV/AIDS go le kana kang?

Ke na le kitso e ntsi	Ke na le kitso e nnye	Ke a itsi	Ga ke itsi go le go ntsi	Ga ke itsi sepe	Ga ke batle go araba
5	4	3	2	1	0

2. O dumalana go le kae le dipolelo tse di latelang?
   Mekgwa e e tlwaelesegileng ya go tshwaetsana ka mogare ke:

	Dumalana ka botlalo	Ke a dumalana	Ga ke dumalane	Ga ke dumalane gotlhelele	Ga ke itsi	Ga ke batle go araba
	5	4	3	2	1	0
Thobalano e e sa sireletsegang						
Tshwaetsego go tswa go Mme go ya kwa leseeng						
Go aroganya mamao- tirisho ya diritibatsi						
Go tshelwa madi a motho yo o tshwaetsegileng						
Go dumedisanya ka diatla						
Go tlhakanela dijo						
Go tlhakanela di dirisiwa						
Lefelo la go thuma la botlhe						

3. O dumalana go le kae ka dipolelo tseno?

	Ke dumalana ka botlalo	Ke a dumalana	Ga ke dumalane	Ga ke dumalane gotlhelele	Ga ke itsi	Ga ke batle go araba
	5	4	3	2	1	0
Batho ba dingwa dingwe le dingwe, bong kgotsa merafe e e riling e mo kotsing ya go ka tshwaediwa ke HIV.						
Go na le setlhabo sa go thibela go tshwaediwa ke mogare wa HIV/AIDS						
Go nna le matlhoko a a tshelanwang a thobalo (STD) go ka tsenya motho mo kotsing ya go ka tshwaediwa ke HIV						
Go nna le balekane ba thobalano ba le bantsi go oketsa kgonagalo ya go ka tshwaediwa ke mogare wa HIV						
Mefuta e mengwe ya thibela pelegi, kwa ntleng ga dikgotlopo (condom) ga e fokotse kgonagalo ya go ka tshwaediwa ke mogare wa HIV						
Fa balekane ba tshwaeditswe ka mogare wa HIV ka bobedi jwa bona, ba tshwanetse to dirisa dikgotlopo (condom)						
Go nwa nnotagi go go feteletseng (jaaka go tlhalositswe mo melawaneng ya khampani ya Pabalesego le Pholo ya go feta 3mg ya nnotagi mo mading) go oketsa maitsholo a a sa siamang mo mothong						

Pharologano e kgolo ya dingwaga mogare ga balekane (inter-generational sex) go ka oketsa kgonagalo ya go ka tshwaediwa ke mogare wa HIV/AIDS.						
Di “ARV” di tlhola HIV/AIDS.						
Dikgotlhopo di ka tlhola HIV/AIDS.						
Dingaka tsa setso di ka fodisa HIV/AIDS.						
Go robala le “virgin” go ka fodisa HIV/AIDS.						
Go tlhapa ka bonako morago ga thobalano le motho yo o tshwaetsegileng, go ka fokotsa kgonagalo ya go ka tshwaediwa ke mogare wa HIV.						

4. O rata tshedimosetso ya HIV/AIDS e ka phasaladiwa ka mokgwa ofeng?

	E ratwa thata	E ratwa go fetisisa	E a ratwa	Ga e ratwe thata	Ga e ratwe	Ga ke batle go araba
	5	4	3	2	1	0
"TV"						
"Radio"						
Lekwalo-dikgang						
"Billboard"						
Lekwalonyana						
"SMS and Internet via cell phone"						
"Company and Clinic workshops"						
"Company training sessions"						
Ditsala/Balosika						

5. Tlhopa puo/dipuo tse o ka ratang go didirisa mo tshedimosong

Tshedimoso Puo eo ka e ratang

	Tswana	Zulu	Pedi	Sotho	Tsonga	Xhosa	Venda	Afrikaans	English	Swazi	Ndebele
"TV"											
"Radio"											
Lekwalo-dikgang											
"Billboard"											
Lekwalonyana											
"SMS and Internet via cell phone"											
"Company and Clinic workshops"											
"Company training sessions"											
Ditsala/Balosika											

Re a leboga

SISHEN MINE RESULTS

QUESTION - BACKGROUND INFORMATION

MARITUS STATUS IN RELATION TO HIV/AIDS KNOWLEDGE

	Sound knowledge			Aware			Only heard of it			Don't know			Not prepared to answer			
	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	NPTA	Responses
Single	7	1	8	9	3	12	0	1	1	0	0	0	3	0	0	3
Married	6	3	9	38	13	51	2	1	3	0	0	0	1	0	0	1
Widow/Widower	4	0	4	1	0	1	0	1	1	0	0	0	0	0	0	0
Separated	1	1	2	11	1	12	1	0	1	0	0	0	1	0	0	1
Live-together	4	0	4	32	2	34	0	0	0	0	0	0	5	0	0	5
Not prepared to answer	1	2	3	2	0	2	6	2	8	0	0	0	2	0	2	4

TYPE OF DWELLING IN RELATION TO HIV/AIDS KNOWLEDGE

	Sound knowledge			Aware			Only heard of it			Don't know			Not prepared to answer			
	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	NPTA	Responses
Company house	6	2	8	13	4	17	0	1	1	0	0	0	3	0	0	3
Company hostel	4	1	5	21	3	24	5	1	6	0	0	0	1	0	0	1
Own house	7	3	10	36	3	39	0	0	0	0	0	0	2	0	0	2
Other	6	1	7	23	9	32	3	2	5	0	0	0	4	0	0	4
Not prepared to answer	0	0	0	0	0	0	1	1	2	0	0	0	2	0	2	4

QUESTION 2 - HIV/AIDS OPINION

	Strongly agree			Agree			Disagree			Strongly disagree			Don't know			Not repared to answer			
	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	NPTA	Responses
Sharing of tools	32	4	36	18	0	18	38	9	47	43	16	59	6	2	8	0	0	2	2
Mother-to-child	51	14	65	49	11	60	8	6	14	2	0	2	15	0	15	12	0	2	14
Shaking of hands	13	3	16	9	8	17	43	4	47	61	16	77	0	0	0	11	0	2	13
Receiving infected blood	84	16	100	52	10	62	1	3	4	0	2	2	0	0	0	0	0	2	2
Drug addicts-shared needles. Clinics where there are no	22	13	35	64	3	67	32	7	39	12	5	17	2	3	5	5	0	2	7
Sharing food	0	0	0	4	9	13	71	12	83	48	10	58	0	0	0	14	0	2	16
Unprotected sex	113	19	132	21	8	29	1	3	4	2	1	3	0	0	0	0	0	2	2
Public swimming pools	14	11	25	5	7	12	72	4	76	32	8	40	14	1	15	0	0	2	2

QUESTION 3 - HIV/AIDS PERCEPTIONS

	Strongly agree			Agree			Disagree			Strongly disagree			Don't know			Not prepared to answer			
	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	Responses	Male	Female	NPTA	Responses
People of any age, sex or race are at risk of getting HIV.	83	15	98	38	11	49	7	3	10	3	1	4	4	1	5	2	0	2	4
There is a vaccine to prevent HIV/AIDS infection.	5	2	7	8	4	12	39	8	47	76	12	88	1	4	5	8	1	2	11
Having a sexually transmitted disease (STD) can affect o	93	17	110	23	7	30	16	2	18	2	3	5	0	1	1	3	1	2	6
Sexual contact with many partners increases one's risk o	103	15	118	30	6	36	1	7	8	0	1	1	0	1	1	3	1	2	6
Birth control methods other than condoms do not reduc	42	21	63	63	6	69	6	3	9	0	0	0	16	0	16	10	1	2	13
Sex partners who both have HIV need to use condoms.	74	15	89	28	13	41	31	2	33	0	0	0	1	0	1	3	1	2	6
Taking excessive alcohol (as stipulated in the company's	28	13	41	52	11	63	41	4	45	12	2	14	0	0	0	4	1	2	7
Large age differences between sexual partners (inter-ge	24	13	37	14	6	20	13	0	13	86	11	97	0	0	0	0	1	2	3
ARVs can cause HIV/AIDS.	0	0	0	3	0	3	69	9	78	37	12	49	22	9	31	6	1	2	9
Condoms can cause HIV/AIDS.	19	7	26	18	4	22	42	2	44	47	12	59	9	5	14	2	1	2	5
Sangoma/Traditional Healers can cure HIV/AIDS.	0	1	1	4	0	4	48	5	53	72	12	84	13	11	24	0	2	2	4
Sleeping with a virgin can cure HIV/AIDS.	0	0	0	2	0	2	91	20	111	43	10	53	1	0	1	0	1	2	3
If you take a shower soon after having sex with an infect	0	0	0	0	0	0	114	11	125	13	14	27	8	4	12	2	2	2	6

QUESTION 4 - MOST PREFERRED MEDIA

	Most preferred			More preferred			Preferred			Least preferred			Not preferred			Not prepared to answer			
	Male	Female	media	Male	Female	media	Male	Female	media	Male	Female	media	Male	Female	media	Male	Female	NPTA	media
TV	23	1	24	0	0	0	0	6	6	0	0	0	12	0	12	0	1	2	3
Radio	42	2	44	6	0	6	0	1	1	0	0	0	2	6	8	0	1	2	3
Newspaper	16	0	16	0	0	0	0	0	0	0	2	2	1	3	4	0	1	2	3
Billboard	1	0	1	0	0	0	0	0	0	0	0	0	8	0	8	0	1	2	3
Pamphlet	4	0	4	0	0	0	0	0	0	0	0	0	2	0	2	0	1	2	3
SMS and Internet via cell phone	43	0	43	0	0	0	1	0	1	0	0	0	14	14	28	0	0	2	2
Company and Clinic Workshops	118	24	142	1	3	4	0	0	0	0	0	0	7	1	8	0	1	2	3
Company Training Sessions	46	17	63	1	8	9	1	0	1	0	0	0	29	0	29	0	0	2	2
Friends/Relatives	32	0	32	0	3	3	0	4	4	0	0	0	24	17	41	0	2	2	4

QUESTION 5 - MOST PREFERRED MEDIA LANGUAGE

	Afrikaans			English			Ndebele			Pedi			Sotho			Swazi			Tsonga		
	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language
TV	12	2	14	36	7	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radio	2	0	2	6	8	14	0	0	0	8	2	10	3	4	7	0	0	0	1	0	1
Newspaper	6	0	6	33	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Billboard	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pamphlet	2	0	2	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMS and Internet via cell phone	3	0	3	34	0	34	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
Company and Clinic Workshops	18	6	24	68	12	80	0	0	0	4	2	6	7	1	8	0	0	0	0	0	0
Company Training Sessions	8	3	11	25	7	32	0	0	0	0	3	3	0	2	2	0	0	0	0	0	0
Friends/Relatives	11	1	12	18	1	19	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0

	Tswana				Xhosa			Venda			Zulu		
	Male	Female	NPTA	language	Male	Female	language	Male	Female	language	Male	Female	language
TV	8	1	2	11	0	0	0	0	0	0	0	0	0
Radio	22	7	2	31	2	0	2	2	0	2	0	0	0
Newspaper	1	0	2	3	0	0	0	0	0	0	0	0	0
Billboard	1	0	0	1	0	0	0	0	0	0	0	0	0
Pamphlet	1	0	1	2	0	0	0	0	0	0	0	0	0
SMS and Internet via cell phone	6	1	1	8	0	0	0	0	0	0	0	0	0
Company and Clinic Workshops	26	9	2	37	0	2	2	0	0	0	0	0	0
Company Training Sessions	11	1	2	14	0	0	0	0	0	0	0	0	0
Friends/Relatives	16	2	0	18	0	0	0	0	0	0	0	0	0

THABAZIMBI MINE RESULTS

QUESTION1 - BACKGROUND INFORMATION

MARITAL STATUS IN RELATION TO HIV/AIDS KNOWLEDGE

	Sound knowledge			Aware			Only heard of it			Don't know			Not prepared to answer		
	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses
Single	4	1	5	12	3	15	2	0	2	0	0	0	0	0	0
Married	5	4	9	23	6	29	1	0	1	0	0	0	2	0	2
Widow/Widower	1	1	2	1	0	1	0	0	0	0	0	0	0	0	0
Separated	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
Live-together	1	1	2	2	0	2	6	1	7	0	0	0	4	0	4
Not prepared to answer	1	1	2	3	0	3	3	0	3	1	0	1	6	1	7

TYPE OF DWELLING IN RELATION TO HIV/AIDS KNOWLEDGE

	Sound knowledge			Aware			Only heard of it			Don't know			Not prepared to answer		
	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses
Company house	3	1	4	11	1	12	1	0	1	0	0	0	1	0	1
Company hostel	2	0	2	19	2	21	3	1	4	0	0	0	2	1	3
Own house	4	5	9	10	3	13	1	0	1	0	0	0	4	0	4
Other	3	2	5	1	2	3	5	0	5	1	0	1	1	0	1
Not prepared to answer	0	0	0	0	1	1	3	0	3	0	0	0	4	0	4

QUESTION 2 - HIV/AIDS OPINION

	Strongly agree			Agree			Disagree			Strongly disagree			Don't know			Not prepared to answer		
	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses
Sharing of tools	24	6	30	11	0	11	16	1	17	17	10	27	5	2	7	6	0	6
Mother-to-child	32	10	42	23	6	29	13	1	14	0	0	0	3	1	4	8	1	9
Shaking of hands	19	6	25	9	1	10	15	0	15	34	12	46	1	0	1	1	0	1
Receiving infected blood	33	16	49	38	2	40	0	0	0	0	1	1	1	0	1	7	0	7
Drug addicts-shared needles. Clinics where there are	29	10	39	22	3	25	11	0	11	15	5	20	2	0	2	0	1	1
Sharing food	1	0	1	2	0	2	27	2	29	46	15	61	1	1	2	2	1	3
Unprotected sex	38	14	52	31	1	32	0	0	0	8	3	11	1	0	1	1	1	2
Public swimming pools	12	0	12	13	1	14	23	2	25	25	12	37	5	3	8	1	1	2

QUESTION 3 - HIV/AIDS PERCEPTIONS

	Strongly agree			Agree			Disagree			Strongly disagree			Don't know			Not prepared to answer		
	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses	Male	Female	responses
People of any age, sex or race are at risk of getting HI	39	15	54	27	2	29	4	1	5	5	1	6	3	0	3	1	0	1
There is a vaccine to prevent HIV/AIDS infection.	14	1	15	8	2	10	18	3	21	30	11	41	8	2	10	1	0	1
Having a sexually transmitted disease (STD) can affect	56	6	62	17	8	25	0	3	3	3	1	4	2	1	3	1	0	1
Sexual contact with many partners increases one's ris	43	16	59	34	2	36	0	1	1	1	0	1	0	0	0	1	0	1
Birth control methods other than condoms do not rec	28	12	40	20	3	23	0	1	1	14	1	15	12	1	13	5	1	6
Sex partners who both have HIV need to use condoms	31	15	46	26	3	29	13	1	14	6	0	6	2	0	2	1	0	1
Taking excessive alcohol (as stipulated in the company	22	10	32	31	6	37	10	2	12	12	1	13	3	0	3	1	0	1
Large age differences between sexual partners (inter-	15	3	18	16	2	18	26	7	33	18	5	23	3	1	4	1	1	2
ARVs can cause HIV/AIDS.	8	1	9	9	0	9	14	5	19	31	12	43	16	0	16	1	1	2
Condoms can cause HIV/AIDS.	17	1	18	6	0	6	16	3	19	37	13	50	2	1	3	1	1	2
Sangomas/Traditional Healers can cure HIV/AIDS.	5	0	5	2	1	3	23	5	28	44	11	55	4	1	5	1	1	2
Sleeping with a virgin can cure HIV/AIDS.	3	0	3	0	0	0	26	2	28	39	16	55	5	0	5	6	1	7
If you take a shower soon after having sex with an inf	8	0	8	3	0	3	24	2	26	37	16	53	6	1	7	1	0	1

QUESTION 4 - MOST PREFERRED MEDIA

	Most preferred			More preferred			Preferred			Least preferred			Not preferred			Not prepared to answer		
	Male	Female	media	Male	Female	media	Male	Female	media	Male	Female	media	Male	Female	media	Male	Female	media
TV	16	3	19	7	5	12	4	4	8	0	0	0	27	1	28	1	0	1
Radio	22	8	30	5	3	8	8	8	16	0	0	0	1	3	4	1	0	1
Newspaper	14	6	20	4	0	4	2	6	8	0	0	0	3	3	6	1	0	1
Billboard	5	1	6	5	3	8	2	1	3	2	3	5	5	3	8	4	0	4
Pamphlet	7	0	7	0	1	1	5	7	12	3	2	5	4	1	5	3	0	3
SMS and Internet via cell phone	15	1	16	5	3	8	4	3	7	4	4	8	3	5	8	1	0	1
Company and Clinic Workshops	66	15	81	1	1	2	3	0	3	0	0	0	6	1	7	1	0	1
Company Training Sessions	21	10	31	6	5	11	5	2	7	0	0	0	14	1	15	1	0	1
Friends/Relatives	26	0	26	2	1	3	9	1	10	0	0	0	5	12	17	2	0	2

QUESTION 5 - MOST PREFERRED MEDIA LANGUAGE

	Afrikaans			English			Ndebele			Pedi			Sotho			Swazi			Tsonga		
	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language
TV	3	3	6	26	8	34	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
Radio	13	1	14	21	2	23	0	0	0	3	0	3	1	0	1	0	0	0	1	0	1
Newspaper	10	4	14	27	8	35	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0
Billboard	3	3	6	14	7	21	0	0	0	3	0	3	2	0	2	0	0	0	0	0	0
Pamphlet	3	3	6	10	8	18	0	0	0	5	0	5	1	0	1	0	0	0	1	0	1
SMS and Internet via cell phone	3	2	5	15	2	17	0	0	0	2	0	2	0	0	0	0	0	0	1	0	1
Company and Clinic Workshops	19	6	25	41	9	50	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0
Company Training Sessions	11	3	14	19	8	27	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
Friends/Relatives	12	3	15	14	2	16	0	0	0	4	1	5	1	0	1	0	0	0	1	0	1

	Tswana			Xhosa			Venda			Zulu		
	Male	Female	language	Male	Female	language	Male	Female	language	Male	Female	language
TV	12	2	14	1	0	1	0	1	1	0	0	0
Radio	22	7	29	1	0	1	3	1	4	0	0	0
Newspaper	6	3	9	1	0	1	1	0	1	0	0	0
Billboard	4	2	6	0	0	0	0	0	0	0	0	0
Pamphlet	6	2	8	1	0	1	0	0	0	0	1	1
SMS and Internet via cell phone	5	1	6	0	0	0	0	0	0	0	0	0
Company and Clinic Workshops	11	6	17	1	0	1	0	0	0	0	0	0
Company Training Sessions	10	2	12	1	0	1	0	0	0	0	0	0
Friends/Relatives	7	0	7	1	0	1	2	1	3	0	0	0

KUMBA RESULTS (SISHEN AND THABAZIMBI RESULTS)

QUESTION 2 - HIV/AIDS OPINION

	Strongly agree			Agree			Disagree			Strongly disagree			Don't know			Not prepared to answer		
	Sishen	Thaba	Responses	Sishen	Thaba	Responses	Sishen	Thaba	Responses	Sishen	Thaba	Responses	Sishen	Thaba	Responses	Sishen	Thaba	Responses
Sharing of Tools	36	30	66	18	13	31	47	17	64	59	27	86	8	7	15	2	4	6
Mother to child	65	42	107	60	29	89	14	14	28	2	0	2	15	4	19	14	9	23
Shaking of hands	16	25	41	17	10	27	47	15	62	77	46	123	0	1	1	13	1	14
Receiving Infected Blood	100	49	149	62	40	102	4	0	4	2	1	3	0	1	1	2	7	9
Drug addicts-shared needles. Clinics v	35	39	74	67	25	92	39	11	50	17	20	37	5	2	7	7	1	8
Sharing food	0	1	1	13	2	15	83	29	112	58	61	119	0	2	2	16	3	19
Unprotected sex	132	52	184	29	34	63	4	0	4	3	12	15	0	0	0	2	0	2
Public swimming pools	25	12	37	12	14	26	76	25	101	40	37	77	15	8	23	2	2	4

QUESTION 3 - HIV/AIDS PERCEPTIONS

	Strongly agree			Agree			Disagree			Strongly disagree			Don't know			Not prepared to answer		
	Sishen	Thaba	Responses	Sishen	Thaba	Responses	Sishen	Thaba	Responses	Sishen	Thaba	Responses	Sishen	Thaba	Responses	Sishen	Thaba	Responses
People of any age, sex or race are at r	98	54	152	49	29	78	10	5	15	4	6	10	5	3	8	4	1	5
There is a vaccine to prevent HIV/AID	7	15	22	12	10	22	47	21	68	88	41	129	5	10	15	11	1	12
Having a sexually transmitted disease	110	62	172	30	25	55	18	3	21	5	4	9	1	3	4	6	1	7
Sexual contact with many partners in	118	59	177	36	36	72	8	1	9	1	1	2	1	0	1	6	1	7
Birth control methods other than con	63	40	103	69	23	92	9	1	10	0	15	15	16	13	29	13	6	19
Sex partners who both have HIV need	89	46	135	41	29	70	33	14	47	0	6	6	1	2	3	6	1	7
Taking excessive alcohol (as stipulate	41	32	73	63	37	100	45	12	57	14	13	27	0	3	3	7	1	8
Large age differences between sexual	37	18	55	20	18	38	13	33	46	97	23	120	0	4	4	3	2	5
ARVs can cause HIV/AIDS.	0	9	9	3	9	12	78	19	97	49	43	92	31	16	47	9	2	11
Condoms can cause HIV/AIDS.	26	18	44	22	6	28	44	19	63	59	50	109	14	3	17	5	2	7
Sangomas/Traditional Healers can cu	1	5	6	4	3	7	53	28	81	84	55	139	24	5	29	4	2	6
Sleeping with a virgin can cure HIV/AI	0	3	3	2	0	2	111	28	139	53	55	108	1	5	6	3	7	10
If you take a shower soon after having	0	8	8	0	3	3	125	26	151	27	53	80	12	7	19	6	1	7

QUESTION 4 - MOST PREFERRED MEDIA

	Mostpreferred			More preferred			Preferred			Least preferred			Not referred			Not prepared to answer		
	Sishen	Thaba	media	Sishen	Thaba	media	Sishen	Thaba	media	Sishen	Thaba	media	Sishen	Thaba	media	Sishen	Thaba	media
TV	25	19	44	0	12	12	6	8	14	0	0	0	12	28	40	3	1	4
Radio	45	30	75	7	8	15	1	16	17	0	0	0	8	4	12	3	1	4
Newspaper	16	20	36	0	4	4	0	8	8	2	0	2	4	6	10	1	1	2
Billboard	1	6	7	0	8	8	0	3	3	0	5	5	8	8	16	1	4	5
Pamphlet	4	7	11	0	1	1	0	12	12	0	5	5	2	5	7	3	3	6
SMS and Internet via cell phone	44	16	60	0	8	8	1	7	8	0	8	8	29	8	37	0	1	1
Company and Clinic Workshops	142	81	223	5	2	7	0	3	3	0	0	0	8	7	15	3	1	4
Company Training Sessions	65	31	96	9	11	20	1	7	8	0	0	0	29	15	44	2	1	3
Friends/Relatives	32	26	58	3	3	6	4	10	14	0	0	0	41	17	58	2	2	4

QUESTION 5 - MOST PREFERRED MEDIA LANGUAGE

	Afrikaans			English			Ndebele			Pedi			Sotho			Swazi			Tsonga		
	Sishen	Thaba	language	Sishen	Thaba	language	Sishen	Thaba	language	Sishen	Thaba	language	Sishen	Thaba	language	Sishen	Thaba	language	Sishen	Thaba	language
TV	12	6	18	43	34	77	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
Radio	3	14	17	14	23	37	0	0	0	10	3	13	7	1	8	0	0	0	1	1	2
Newspaper	6	14	20	35	35	70	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0
Billboard	2	6	8	1	21	22	0	0	0	0	3	3	0	2	2	0	0	0	0	0	0
Pamphlet	2	6	8	4	18	22	0	0	0	0	5	5	0	1	1	0	0	0	0	1	1
SMS and Internet via cell phone	5	5	10	35	17	52	0	0	0	2	2	4	0	0	0	0	0	0	0	1	1
Company and Clinic Workshops	25	25	50	81	50	131	0	0	0	6	3	9	8	0	8	0	0	0	0	0	0
Company Training Sessions	12	14	26	33	27	60	0	0	0	3	2	5	2	0	2	0	0	0	0	0	0
Friends/Relatives	12	15	27	19	16	35	0	0	0	1	5	6	0	1	1	0	0	0	0	1	1

Tswana			Xhosa			Venda			Zulu		
Sishen	Thaba	language	Sishen	Thaba	language	Sishen	Thaba	language	Sishen	Thaba	language
11	14	25	0	1	1	0	1	1	0	0	0
31	29	60	2	1	3	2	4	6	0	0	0
3	9	12	0	1	1	0	1	1	0	0	0
1	6	7	0	0	0	0	0	0	0	0	0
2	8	10	0	1	1	0	0	0	0	1	1
8	6	14	0	0	0	0	0	0	0	0	0
37	17	54	2	1	3	0	0	0	0	0	0
14	12	26	0	1	1	0	0	0	0	0	0
18	7	25	0	1	1	0	3	3	0	0	0