MASTER THESIS

PERSUADING SOUTH AFRICAN STUDENTS TO UNDERGO HIV COUNSELING AND TESTING THROUGH CAMPAIGN BROCHURES

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Persuading South African students to undergo HIV Counseling and Testing through campaign brochures | Benthe Bosma
During my Master course in Persuasive Health Communication, the topic of HIV/AIDS health communication in South Africa was brought to my attention, which triggered my interest in the topic. Half a year later I travelled to Stellenbosch, South Africa for five months to carry out research. Not only was I able to investigate the topic, I gained knowledge about South African culture, norms and values as well. It needs to be emphasised that South Africa is home to many different cultures, habits and languages and to understand the problem at hand, it is important to bear in mind the country and its people. Spending time in South Africa brought me a better understanding of the HIV/AIDS issue and moreover a better understanding of life as I know it: privileged. My needs, as established in Maslow’s’ hierarchy of needs pyramid are different from the ones of a large part of the South African population. Experiencing this made me more aware of living from day to day and made me aware of the norms that people hold.

I cannot solve the HIV/AIDS pandemic, nor create a change of mindset or behaviour with my research. However I can play a role in the struggle against HIV/AIDS by contributing to scientific research with regard to the topic. With my research I hope to have contributed a building block for a better future with fewer HIV/AIDS infections and with the ambitious vision that one day we will have no AIDS-related deaths in the world, as stated by UNAIDS (UNAIDS World AIDS Day Report, 2011).

Throughout the writing process I worked with several people who helped me and from whom I learnt a lot. I want to thank them because I would not have been able to carry out this study and write the present report without their help.

First, I would like to thank my two guiding professors for their critical view and guidance during the whole process and for making it possible to do this research in South Africa. I thank professor De Stadler for the weekly meetings in Stellenbosch, linking me to the right connections and for his personal guidance when things did not go as planned. My gratitude also goes to professor Jansen for his personal guidance throughout the whole process in the Netherlands as well as in South Africa.

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Benthe Bosma
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SUMMARY

This study aims to give new insights into developing effective HIV Counselling and Testing (HCT) promotion messages that persuade South African students to get tested. It intends to ultimately provide campaign developers with views on content rather than format, which may help develop more effective documents to communicate on HCT. In 2009 the South African National AIDS Council (SANAC) announced a massive campaign with messaging guidelines that should be used in campaign material. The guidelines state that messages should remain positive, hopeful and forward-focused, should emphasise the benefits of testing and requests not to delve into questions about stigma, discrimination and confidentiality of medical staff (SANAC, 2010). In earlier research, Broersma and Jansen (2012) studied the beliefs of South African students that needed to be addressed when trying to persuade them to go for HIV Counselling and Testing. They found a contradictory focus on SANAC’s guidelines for HCT messaging. Broersma and Jansen (2012, p.33) focussed on several variables that proved to be related to HCT intention. Beliefs about “approval of students’ parents, self-confidence in going for HCT, fear and stress about the outcome of testing, stigma towards people living with HIV/AIDS and perceived susceptibility to HIV/AIDS” (Broersma and Jansen, 2012) should be addressed in HCT messages, according to the authors.

It is important to note that the SANAC guidelines make no distinction between various target groups and cultural background, while Broersma and Jansen’s research (2012) specifically focussed on African South African students, in other words black South African students. There was, however, no information about reactions from students with a different ethnic background. Information from various ethnic groups may be relevant for further development of successful HCT campaign material, which should preferably aim to reach various target groups concurrently.

Therefore this study focuses on South African students as a whole, meaning that it includes the four ethnic groups present in South Africa: African (the so-called black South Africans), Coloured, Indian and White. This classification was made in accordance with the governmental division of population groups (Statistics South Africa, 2013). The present study focuses on the differences in two versions of HCT campaign brochures. One version corresponded with the SANAC guidelines; the other with information that can be deducted from the findings of Broersma and Jansen (2012). The main research question in this research is formulated as follow:

*How can HCT brochures be developed optimally, adhering to the beliefs and intentions of South African students, in accordance with the SANAC guidelines or with suggestions of previous research of Jansen & Broersma (2012)?*
The Integrative Model of Behavioural Prediction (IMBP) of Fishbein and Yzer (2003) was used as a theoretical framework. The IMBP is a model used for predicting planned behaviour and for identifying its critical determinants. Using this theoretical framework for designing health campaign messages makes “health promotion and intervention development a task to understand which methods and strategies generally work to change behaviour, which determinants of behaviour are suggested from both theory and evidence, which determinants may be specific to the priority population, and which cultural elements may affect the health behaviour and/ or the use of a programme” (Bertens et al., 2008).

The present study measured two brochure versions. Version 1- after an original HCT Khomanani brochure- closely corresponded with the SANAC guidelines (SANAC 2010). Khomanani is an organisation that designs health intervention campaigns. Version 2 specifically targeted those beliefs that Broersma and Jansen (2012) found to be most relevant. The efficacy of both versions was measured with the same set of questions. The questionnaire was based on the one developed by Broersma and Jansen (2012). It contained questions with regard to past behaviour, behavioural intention, global perceptions and existing beliefs concerning HCT. The survey was completed with questions about the readability, attractiveness and persuasiveness of the brochures. Data were collected from 163 South African students at Stellenbosch University.

Results showed that findings of the research did not support the existing Integrative Model of Behavioral Prediction (Yzer, 2008) due to the fact that the relations between the proximal and distal variables as assumed in the IMBP were not confirmed. Two underlying beliefs proved to be salient variables in predictions of students to undergo HCT. These variables were students’ belief that their friends would approve of their going for HCT and the students’ beliefs about the likelihood that the uptake of HCT would result in certain outcomes, in compliance with results of Tempelman and Vermeer (2009). Also, differences were found among students that had taken a test the past. Students that had had taken a test before showed more intention to undergo HCT.

Moreover the version of the brochure proved to have a significant effect on HCT intention. Students, who read the brochure that specifically targeted the beliefs that Jansen and Broersma (2012) found to be most relevant for HCT intention in African South African students, were more likely to go for HCT than respondents that read the brochure compliant with the guidelines of the South African National AIDS Council (SANAC, 2010).

Another useful outcome of this study may be that the manipulated brochure, in accordance with findings deducted from research of Broersma and Jansen (2012)- version 2- had a significant positive influence on the belief of students that they would not be too afraid or stressful about going for HCT.

There were clear differences between ethnic backgrounds on the proximal variables. Non-African South African students proved to have a stronger belief that they would be able to deal with possible disadvantageous outcomes than African South African students. Moreover, results showed that non-African students held a more positive perception of having control over their HCT intention (self-efficacy).
# TABLE OF CONTENTS

Preface .................................................................................................................................................. 3

Summary ............................................................................................................................................... 5

Table of contents ................................................................................................................................ 7

1. Research context ............................................................................................................................. 13
   1.1 Introduction .................................................................................................................................. 13
   1.2 Research background ............................................................................................................... 15
   1.3 Aim of the study ....................................................................................................................... 16

2. Theoretical framework ..................................................................................................................... 19
   2.1 The state of the HIV/AIDS epidemic ....................................................................................... 19
   2.2 South Africa’s current situation ............................................................................................... 20
   2.3 Behaviour of South Africans .................................................................................................... 21
       2.3.1 Young people in South Africa ............................................................................................. 22
   2.4 HIV Counselling and Testing .................................................................................................. 23
   2.5 South African health promotion campaigns .......................................................................... 25
   2.6 Persuasion, attitude and behaviour ......................................................................................... 26
   2.7 Integrative Model of Behavioural Prediction .......................................................................... 27
       2.7.1 Determinants of behaviour .................................................................................................. 27
       2.7.2 Variables of the IMBP ......................................................................................................... 27
   2.8 Content and format .................................................................................................................... 29
       2.8.1 Persuasive strategies ........................................................................................................... 29
       2.8.2 Effectiveness of narratives ................................................................................................. 30
       2.8.3 Involvement ....................................................................................................................... 31
       2.8.4 Social validation ................................................................................................................ 31
       2.8.5 Use of exemplars .............................................................................................................. 31
       2.8.6 Desert heuristic ................................................................................................................ 32

3. Method ............................................................................................................................................ 33
   3.1 Respondents ............................................................................................................................... 33
   3.2 Materials .................................................................................................................................... 34
   3.3 Questionnaire ............................................................................................................................. 35
   3.4 Brochure .................................................................................................................................... 41
       3.4.1 Brochure process ................................................................................................................. 41
       3.4.2 Brochure guidelines .......................................................................................................... 42
       3.4.3 Design of the brochures ................................................................................................... 46
       3.4.4 Brochure content .............................................................................................................. 47
   3.5 Pre-test ....................................................................................................................................... 53
   3.6 Experimental design .................................................................................................................. 54
   3.7 Procedure ................................................................................................................................... 55
   3.8 Data analysis .............................................................................................................................. 55
1. RESEARCH CONTEXT

Before the study is described in more detail, a short introduction is given. Then, the research problem is described. In order to provide a full context for this study, a view on the current situation of South Africa and HIV Counselling and Testing are provided as well.

1.1 INTRODUCTION

“The size as well as the severe consequences of the HIV/AIDS problem in South Africa can hardly be overestimated” (Hoeken & Swanepoel, 2008). In 2011, an estimated 5.6 million people were living with HIV/AIDS in South Africa, the highest number in any country (UNAIDS, 2011). In that same year, 270 190 South Africans died of AIDS-related causes (UNAIDS, 2013). According to researchers from the Medical Research Council of South Africa (MRC), this figure might be massively underestimated mainly because the majority of deaths due to HIV are misclassified (Avert, 2013). The virus alone does not kill people and thus HIV should be recorded as an underlying cause of death. However this is not always the case, since doctors tend to record only the immediate cause of death, for instance tuberculosis. A 2010 research showed that tuberculosis is the number-one cause of death in South Africa (Statistics South Africa, 2013). However, according to the most recent government research AIDS accounts for 31.9 percent of all deaths (Statistics South Africa, 2013).

Several government departments and non-governmental organisations working in the HIV/AIDS field are combating this severe pandemic in South Africa. They have responded by initiating a number of comprehensive programmes to combat the disease, such as providing condoms, free antiretroviral drugs and HIV Counselling and Testing (HCT) (Hoeken & Swanepoel, 2008). This research focuses on HCT, an important tool to combat the HIV/AIDS pandemic. “Although HIV testing is not a goal in itself, it is motivated by prevention and care and support of goals” (Swanepoel, 2005). Knowing one’s status and getting support through counselling may help curb the spread of HIV. Many people in South Africa are still not getting tested, especially since people cannot be forced to go for HCT or adhere to the recommended behaviour. This is where communication comes into play.

According to Swanepoel (2005), changes in the behaviours fuelling the epidemic in South Africa are essential given the lack of a cure for HIV/AIDS. “Media-based campaigns, such as the Beyond Awareness 1&2 campaign, the Soul City campaign, the Khomanani campaign and the LoveLife campaign, are important to address these multiple HIV/AIDS-related behaviours” (Swanepoel, 2005). Within South Africa, several large-scale HIV/AIDS communication campaigns have been run without much success (Epidasa, 2013). This may be attributed to the complexity of undergoing HIV testing, but also to the designers of such campaigns, who may be unaware of research advances (Hoeken & Swanepoel, 2008). The lack of resources that most governmental and non-governmental agencies face makes it relevant to invest in research into the effectiveness of promotional material for HIV/AIDS-prevention (Epidasa, 2013).
Moreover, Swanepoel (2005) mentions several other reasons for the inability of media campaigns to facilitate the “scope and rate of behavioural change required to counter the HIV/AIDS epidemic effectively”, namely the high rate of prevalence for HIV/AIDS (now an estimated 11 percent); the fact that there still is a high incidence rate of new HIV-infections (an estimated 1400 cases per day (RedRibbon, 2010)) and the low uptake of HCT.

Within the field of health communication Fishbein and Yzer (2003) demonstrated the usefulness and importance of the Integrative Model of Behavioural Prediction as a powerful tool in designing campaign material that aims to increase health behaviours.

The regulations of the South African National AIDS Council (SANAC) regarding health campaign messages related to HCT have given rise to this research. The study of Broersma & Jansen (2012) into beliefs of African South African students and how to persuade them to take up HIV Counselling and Testing illustrated how a theoretical framework such as the Integrative Model of Behavioural Prediction can be used for decisions on content in HCT messages. According to their study, “promotion messages aimed at convincing black students in South Africa to go for HCT should focus on a number of variables, which proved to be related, directly or indirectly, to HCT intention” (Broersma and Jansen, 2012). “Campaign developers should focus on students’ belief that their parents would approve of going for HCT; the fear and the stress they may expect to experience when going for HCT; their self-confidence in dealing with a possibly disadvantageous outcome of the HIV-test; their possible stigmatising attitude towards PLWHAs; and their perceived susceptibility to HIV/AIDS” (Broersma and Jansen, 2012). These findings stand in contrast to the guidelines of the South African National AIDS Council.

This study focuses on the determinants for South African students’ HCT uptake and the efficacy of the brochures that aim to persuade them. According to Swanepoel et al. (2008) message designers should “differentiate between segments of students when designing messages to persuade them”. The research carried out by Broersma and Jansen (2012) focused on the beliefs of African South African students. The SANAC guidelines make no distinction between various target groups. In the present research, information from different ethnicities among South African students was gathered and African, White, Coloured and Indian students at Stellenbosch University were studied.

Background information and the aim of the study are given in the introduction. Later, the current situation of South Africa and HIV Counselling and Testing are discussed. The theoretical framework of Fishbein and Yzer (2003), the Integrative Model of Behavioural Prediction, and its efficiency in predicting planned behaviour like HCT intention, are discussed in detail further on. To answer the central question of this research two materials were developed; a questionnaire based on earlier research by Broersma and Jansen (2012) and two brochure versions based on the original Khomanani campaign brochure ‘your relationship, taking it to the next level’. These are described in the methodology section. The result section presents the outcomes of the survey of both brochures and tries to answer research questions 1,2 and 3. Finally, an answer to the central question is given in the conclusion.
1.2 RESEARCH BACKGROUND

On 1 December 2009, World AIDS Day, the South-African president announced a massive campaign to mobilise all South Africans to get tested for HIV and to ensure that every South African knew his or her HIV status. The campaign launched in April of 2010 (SANAC, 2010) and became one of the largest partnerships between the government, civil society and the private sector.

The South African government mentioned a number of guidelines that needed to be followed in persuasive campaign designs. These guidelines indicated that messages should “remain positive, hopeful and forward-focused, focusing on the benefits of testing and disclosure between partners. They should not delve into questions of discrimination, stigma or confidentiality issues” (SANAC, 2010, p.12). Results of previous research (e.g. Broersma & Jansen, 2012) into specific beliefs that should be addressed when trying to persuade African South African students to go for HCT showed different findings with regard to beliefs that need to be used in persuasive HCT documents and stated that the developers of promotional messages should focus on the susceptibility to HIV, social pressure towards going for HCT, the stigmatisation of People Living With HIV/AIDS (PLWHAs) and on how to cope with a possible disadvantageous test outcome.

Various studies into HCT intention have been done, showing the valuable role of HIV Counselling and Testing, formerly known as Voluntary Counselling and Testing (VCT), in HIV/AIDS prevention. The research of Tempelman and Vermeer (2009) studied the factors that encouraged people to go or skip VCT. Their research showed that attitude and subjective norms (perceived pressure of others) were predictors of people’s intention to undergo HIV testing (Tempelman and Vermeer, 2009). This means that when people have a positive attitude towards HCT and when they feel pressure from significant others to go for HCT, they are more willing to be tested for HIV. Tempelman and Vermeer (2009) based their study on the Theory of Planned Behaviour (Azjen, 1991) that explains the factors determining behaviour and postulates that behaviour is a result of intention. Another variable that influenced participation in HCT was personal knowledge about HIV/AIDS and HIV testing (Tempelman and Vermeer, 2009). The research of Yzer (2008) into determinants of behaviour demonstrates the usefulness of the Integrative Model of Behavioural Prediction (IMBP). Yzer (2008) showed that the perceptions, attitude, perceived norms and self-efficacy (a person’s capability to perform a specific behaviour) were all determinants of intention in a study on condom use. It is important to note that the significance of the predictors of intention varies widely among behaviours and population groups.

The research of Swanepoel et al. (2008) focussed on the determinants of South African students’ HCT behaviour and on the efficacy of a HCT brochure that aimed to persuade South Africans to get tested. Their results showed significant differences between subgroups of students (African and White) with regard to their intention to get tested and differences appeared between determinants of intention. African students were more willing to go for HCT than white ones.
Swanepoel et al. (2008) stated that, for the group as a whole, the main predictors were: individual expectation and belief about VCT “to be an effective means in determining their health and that of others, and their knowledge (or lack thereof) of a site where they could get tested”; their perceived susceptibility (extent to which they consider themselves to be at risk for HIV/AIDS) and their expectations of coping with the negative consequences of testing HIV positive with regard to living a normal live (Swanepoel et al, 2008). Also, differences were found among students that had considered going for HIV testing or already had taken one in the past and students who had not. Not surprisingly the students that had considered to go or had taken a test before showed more intention to participate in HCT.

The Broersma and Jansen study (2012), where IMBP was used as a theoretical framework for determining the predictors of intention, and ultimately behaviour, targeted African South African students. Yzer (2008) stated, “because beliefs will differ between behaviours and populations, and because of the role of beliefs in behaviour change, it is essential to understand a behaviour from the perspective of the target population before one attempts to change behaviour”. Results also showed that behaviour is a function of the population and cultural context. Determinants of behaviour vary among different cultures since, for example, HCT intention is particularly guided by attitudinal influence in individual cultures and by normative influence in collectivistic cultures (Yzer, 2008). Therefore it is important to take both the target group and the cultural context into account. According to Swanepoel et al. (2008) “campaign developers aiming to persuade South African students to go for VCT might want to consider differentiating between the various groups of students on the basis of their VCT intentions”. Moreover Swanepoel et al. (2008) mention that more attention must be paid to the specific predictors of intention such as stigma towards people living with HIV/AIDS and fear of coping with the negative consequences of testing positive.

1.3 AIM OF THE STUDY

The purpose of this study is to add new insights on how to develop HCT promotion messages that persuade South African students to participate in HIV Counselling and Testing. The focus lies on the content (what to tell), rather than on the format (how to tell it). The content was set up in the most optimal format according to theory, and two versions of a HCT brochure were compared.

More specifically, this research aimed to find out whether a brochure was more effective in addressing the beliefs and intentions with regard to HCT if such beliefs were addressed in accordance to the SANAC guidelines – as measured through a version of the original Khomanani brochure- or in accordance to the findings of previous research carried out by Jansen & Broersma (2012). The focus lies on finding the effects of the two versions. In one version, the message is derived from existing guidelines from the South African National AIDS Council (SANAC). In the other, the content is based on information from Broersma & Jansen (2012) regarding HCT intentions and predictors of such intentions, carried out among African South African students at a previously disadvantaged university.
The brochure that corresponded to the SANAC guidelines requested campaign developers to “remain positive and hopeful and forward-focused [and not to] delve into questions of discrimination, stigma or confidentiality issues” (SANAC, 2010: 12). The other version targeted the beliefs that Broersma & Jansen (2012) considered most important predictors of HCT intention among African South African students: “their belief that parents approve of going for HCT; the fear and the stress they may expect to experience when going for HCT; their self-confidence respect of dealing with a possibly disadvantageous outcome of the HIV test; their possible stigmatising attitude toward PLWHAs; and their perceived susceptibility to HIV/AIDS” (Broersma & Jansen, 2012: 33).

The SANAC guidelines make no distinction between different target groups. However the study of Broersma and Jansen (2012) was conducted in one South African region and among participants from one specific target group. No data were gathered on South African students with a different ethnic background. According to Yzer (2008) the likelihood of behavioural change improves when message-based interventions target the predicting variables in the specific target group.

To measure whether there are different determinants among subgroups of South African students, this research targets various groups, namely: White, African, Indian and Coloured. In view of the role that cultural background may play as a distal variable in accordance with the Integrative Model of Behavioural Prediction (Fishbein & Yzer, 2003), HCT related beliefs that proved to be relevant for African South African students might deviate from beliefs that are relevant for non-African South African students. As stated by Yzer (2008) in his research into determinants of health behaviour for the design of culturally appropriate HIV interventions “we can only understand a person’s behaviour by understanding that person’s beliefs, and we can only understand these beliefs if we assess them from the perspective of the person’s cultural, political and socio-economic background (Yzer, 2008, p. 65).

Because this research is based on the outcomes of the study of Broersma & Jansen (2012), the expectation is that African South African students will respond better to the version based on their conclusions. Aiming at different target groups, information about reactions of the whole South African group is relevant for further development of HCT promotion campaigns. Data on HCT related beliefs among all South African target groups are not available yet.

Therefore, the research question of this study is:

*How can HCT brochures be developed optimally, adhering to the beliefs and intentions of South African students, in accordance with the SANAC guidelines or with suggestions of previous research of Jansen & Broersma (2012)?*
Focusing on measuring the effectiveness of promotion brochures to persuade people to undergo HIV Counselling and Testing, the sub questions that support the research question are:

1. What is the effect of the two different versions of the Khomanani brochure on students’ intention to go for HCT and on the determinants of these intentions?

2. What is the influence of various determinants on students’ intention to participate in HCT?

3. How is this influence related to characteristics such as ethnic background and past behaviour?
2. THEORETICAL FRAMEWORK

Theoretical background information is discussed in this section. First a view on the HIV/AIDS epidemic is given, followed by South Africa’s current situation and HIV/AIDs-related behaviour in South Africa. The first two sections on HIV/AIDS in general and HIV/AIDS in South Africa provide demographic and epidemiological information. Then, HIV Counselling and Testing is explained and background information is given about HIV prevalence among young South Africans. Later, background information on South African health campaigns is given and the usefulness of the Integrative Model of Behavioural Prediction as a theoretical framework is discussed. Finally, persuasion, attitude and behaviour are examined in more detail, as are content and format with regard to the brochure design.

2.1 THE STATE OF THE HIV/AIDS EPIDEMIC

More people than ever are living with HIV, largely due to greater access to treatment, which increases their life expectancy (UNAIDS World AIDS Day Report, 2011). Since 2001 the number of HIV infections worldwide has increased by 17%. This reflects the large number of new HIV infections and a significant expansion in access to antiretroviral therapy, which has helped reduce AIDS-related deaths, especially in more recent years (UNAIDS Global World AIDS Day Report, 2011).

1.7 million people have died due to AIDS since its appearance. Worldwide, 34 million people are currently living with HIV. Approximately half of them are unaware of their HIV status. This number is so high due to the ease with which HIV spreads. In 2012 alone, there were 2.5 million new HIV infections. Of the 14.8 million people eligible for HIV treatment, only 8 million actually receive it.

In 2012, there were half a million fewer deaths from AIDS-related illness, compared to 2005 (UNAIDS Global World AIDS Day Report, 2012). In 14 countries around the world, AIDS-related deaths have dropped by more than 50% in the last 6 years. These numbers show promising progress in curbing the spread of HIV and AIDS-related deaths. “Although AIDS remains one of the world’s most serious health challenges, global solidarity in the AIDS response during the past decade continues to generate extraordinary health gains” (UNAIDS Global Report, 2012).
Success in scaling HIV programmes, combined with new tools to prevent people from becoming infected and from dying from AIDS-related causes, has facilitated the work of organisations combatting the HIV/AIDS epidemic (UNAIDS Global Report, 2012). As services scaled up in the last decade, there has been a 60% increase in the number of people accessing lifesaving treatment. Not only treatment showed progress, the number of newly infected people globally is continuing to decline, with 700 000 fewer HIV infections in 2012 than in 2011. Although much of the news on HIV/AIDS is encouraging, challenges remain. For example the adherence to antiretroviral therapy plays an important role in the spread of HIV. HIV treatment is for life and those infected need to take pills daily without failure. Studies show that as soon as those with an HIV-infection regain good health, their adherence to treatment invariably falls (UNAIDS Global World AIDS Day Report, 2012). In the last few years, national epidemics have continued to expand in many parts of the world. As the world map below shows, South Africa is hit hardest of all.

2.2 SOUTH AFRICA’S CURRENT SITUATION

South Africa has a population of 52.9 million of which 79.8 % are African (the so-called black), 9% Coloured, 8.7% White and 2.5% Indian (Statistics South Africa, 2013). Population growth reaches 1.34 % per year with 1,084 397 births yearly. The amount of deaths in South Africa in 2012 was 559.631 with 270.190 people dying of AIDS. This means that 48% of all deaths could be attributed to AIDS. However, in the last seven years South Africa has seen a decline of 27% in AIDS-related deaths (from 370 874 to 270 190), in other words, there have been 100,000 fewer AIDS-related deaths.
With a prevalence rate of 11% among people between 15 and 49 years of age, 5.6 million people are living with HIV in South Africa. This prevalence rate does not include the 29% of the population under the age of 15 and the 7.8% older than 50. 35% of South Africans are unaware of their HIV serostatus. Note that the average life expectancy of people living in South Africa is already low at an estimated 59.6 years (Statistics South Africa, 2013). For males, life expectancy is even lower; an estimated 57.7 years while females are expected to live until 61.4 years of age (Statistics South Africa, 2013). Surprisingly females account for 17.4% of the HIV infections in South Africa and males for 15.9%, even though women have a higher life expectancy on average.

In 2007, South Africa, with only 0.7% of the world’s population, had 17% of the global burden of HIV infection (UNAIDS, 2012). Today South Africa still has the highest number of people infected with HIV/AIDS. Nonetheless, there have been notable achievements in disease management, including substantial improvements in access to condoms and the scaling-up of free antiretroviral treatment therapy (ART) (UNAIDS, 2012). This can partially be attributed to South African government initiatives. The country has made the highest domestic investment in HIV/AIDS of all low and middle-income countries. However, the annual survey of UNAIDS (2012) and part of the National Strategic Plan: HIV & AIDS, showed that “despite substantial increases in the public sector expenditure to increase access to free antiretroviral therapy, the total number of persons living with HIV was still very high” (UNAIDS Global World AIDS Report, 2012). Moreover, despite the number of people on ART in the last four years, half of all those eligible for treatment still do not have access.

Sub-Saharan Africa remains the region most affected by HIV, accounting for 70% of all new HIV-infections in 2010 (UNAIDS World AIDS Day Report, 2011). According to the same UNAIDS report, almost half of the deaths from AIDS-related illnesses in 2010 occurred in Southern Africa. And the epidemic continues to be most severe in South Africa. Statistically, South Africa is one of the countries with the largest number and the highest percentage of HIV/AIDS infected individuals in the world. Of the 34 million people infected with HIV/AIDS worldwide, 5.6 million live in South Africa; thus almost 16.5 % of all the HIV infected people worldwide live in that country. In 2013, there were nearly 53 million people living in South Africa; this means that around 11% of the population is infected with HIV/AIDS. This in spite of South Africa managing to reduce the number of new HIV-infections by 41% in the last ten years.

2.3 BEHAVIOUR OF SOUTH AFRICANS

“Understanding the relationship between sexual behaviour and the risk of HIV infection is critical to the development of HIV prevention strategies” (Johnson et al, 2009). The data of Johnson et al. (2009) in their research into sexual behaviour patterns in South Africa show that concurrent partnership and other non-spousal partnerships are major drivers of the HIV/AIDS epidemic in South Africa.
Concurrency, late age at first marriage (Shisana et al, 2004), non-spousal relationships, commercial sex, frequency of unprotected sex and condom use play a major role in the epidemiology of HIV in South Africa, where concurrent partnership accounts for roughly three-quarters of new HIV infections (Johnson et al, 2009).

An UNAIDS Survey in 2012 (UNAIDS Global Report, 2012) indicated several key behavioural factors among South Africans. The data were comprised of several sources such as the South African National HIV Prevalence, Incidence, Behaviour and Communication Survey of 2008 and a Human Sciences Research Council research of 2009. The first factor entailed the identification of ways to correctly prevent the sexual transmission of HIV. Only 28.7% of the young men and women surveyed knew how to identify correct ways of safe sex without risk of transmission. This means that 71.3% of the population does not know or cannot identify correct ways to prevent the transmission of HIV. The next factor was related to the number of sexual partners. Two groups were asked whether they had had more than one sexual partner in the last 12 months. 20.6% of the respondents between 15 and 24 years of age had had more than one sexual partner in the previous 12 months compared to 8% of people in the age category 25 to 49. The percentage of condom use during the last intercourse differed between the two groups. 91% of the people between 25 and 49 used a condom while 76.2% of youngsters between 20 and 24 used a condom. Hence, 23.8% of respondents had not used a condom in their last sexual intercourse. Note however that this number is not indicative of whether the use of a condom is frequent behaviour or not.

HIV testing behaviour in South Africa according to the UNAIDS Global AIDS Response Progress Report (2012) was relatively low. 24.6% of the young men and women aged 20-24 received an HIV-test in the previous 12 months while the percentage rose to 29 for men and women between 25 and 49 years old.

**2.3.1 YOUNG PEOPLE IN SOUTH AFRICA**

“The actions of young people are shaping the future of AIDS across the world” (UNAIDS Global World AIDS Day Report, 2012). Every day more than 2400 people in the world become infected with HIV (UNAIDS WADR, 2012). The development of effective HIV prevention programmes has therefore become a public health and policy priority (UNAIDS GR, 2012).

In the last decade the prevalence of HIV- an indicator of new HIV infections- fell by nearly 27% among people aged 15 to 24 around the world. Yet youngsters remain at the center of the HIV/AIDS epidemic and have the power to change its course. Globally, young people between 15 and 24 years of age account for 40% of all new adult HIV/AIDS infections and South African youth aged 15 to 24 experience the highest prevalence of HIV in the world (UNAIDS, Global Report 2012).
In terms of explanations for unsafe sexual behaviour among South African youth, the findings of Eaton et al. (2003) illustrate the powerful impact of the proximal contexts (interpersonal relationships and physical and organisational environment) and distal contexts (culture and structural factors) and, in particular, the pervasive effect of poverty and social norms (Eaton et al, 2003).

According to research by Eaton et al. (2003) into the sexual behaviour of young South Africans aged 14 to 35, 50% of young people are sexually active by the age of 16; “the majority of school students who had ever experienced sexual intercourse reported at the most one partner in the previous year, with a persistent minority of between 1 and 5% of females and 10 to 25% of males having more than four partners per year; and between 50% and 60% of sexually active youth report never using condoms” (Eaton et al, 2003). These findings are shocking considering that there are 476 000 young people infected with HIV in South Africa between the age of 15 and 24. South African government statistics (2013) show that youth accounts for 8.5% of all HIV infections in the country (Statistics South Africa, 2013).

2.4 HIV COUNSELLING AND TESTING

In South Africa the number of people dying from AIDS-related causes began to decline in the mid-2000s because of “scaled up access to antiretroviral therapy and decline in HIV incidence since the peak of the epidemic in 1997” (UNAIDS Global Report, 2013). Almost 2 million people are now on ART, compared to fewer than 1 million in 2009. The South African ART programme is the largest in the world, and there are plans for 3 million people to have access to it by 2015 (UNAIDS, 2012). Despite the high prevalence rate among the general population, an estimated 35% have been tested and are thus aware of their HIV status (UNAIDS World AIDS Day Report, 2012).

To address the HIV/AIDS epidemic, adequate prevention is required along with adequate HCT programmes (Swanepoel, 2005). HIV Counselling and Testing is an important mechanism in the struggle against the epidemic. One of the most successful features of South Africa’s national AIDS plan is its focus on the rapid scaling up of HIV treatment (UNAIDS, 2012). Massive campaigns are needed for this purpose. The campaign announced on 1 December 2009, World AIDS Day, aimed to mobilise all South Africans to get tested for HIV and ensure that everyone became aware of their HIV status. The new governmental approach included a shift from Voluntary Counselling and Testing towards HIV Counselling and Testing. VCT differs from the current HCT in that HIV testing previously had to be initiated by the customer. “The shift towards HCT indicates a shift to HIV Counselling and Testing (HCT) to be offered by health providers on the occasion of any patient’s visit to any health facility for any ailment” (SANAC, 2010).
Therefore HCT focuses on persuading people to go for testing and counselling in an approach where HIV testing becomes routine when patients visit a health facility. The former Voluntary Counselling & Testing (VCT) is an HIV-prevention intervention initiated by the client at his or her free will and provided opportunity for the client to confidentially explore and understand his or her HIV risks and to learn his/her HIV infection status with the support of a counsellor (Avert, 2013). VCT entails Counselling, Testing and Referral and indicates a client approach.

The recently introduced HIV Counselling and Testing (HCT) is composed of two types of testing, VCT (Voluntary Counselling and Testing), and PIHCT (Provider Initiated HIV Counselling and Testing). VCT consists of pre-test counselling, voluntary testing for HIV/AIDS and post-test counselling. HCT remains voluntary, but health care workers are obligated to explain to patients the importance both of knowing their HIV status and of habitually testing for HIV (SANAC, 2010).

According to Van Dyk and Dyk (2003) several determinants of behaviour play an important role in choosing for Voluntary Counselling and testing. Results of their research into VCT programmes in South Africa indicate that while research participants did not oppose VCT in principle, “they professed a deep mistrust of health-care professionals, and feared discrimination and rejection by the latter, their sexual partners, and their communities”. Moreover participants did not know how to “disclose their HIV-positive status and were concerned about testing that did not include treatment and/or follow-up support”, as well as their ability to deal with the ensuing psychological turmoil in the event of testing HIV-positive (Van Dyk & Van Dyk, 2003).

In 2010, a quarter of the population between 15 and 49 years old had been tested for HIV. The launch of the national HIV Counselling and Testing (HTC) campaign resulted in a striking increase in the number of people accessing ART (Avert, 2013).

HCT and today’s new treatments provide those with HIV the possibility to live a longer and healthier life. Therefore ACTS based strategies are being implemented for a more reality-based approach at the Centres for Disease Control and Prevention. These are streamlined procedures for routine testing without wasting too much time. Previous research on HCT showed that the procedure of HCT entailed pre-test counselling, an HIV test and post-test counselling. However, the currently used ACTS-model favours a streamlined short procedure. These faster procedures have already been implemented at clinics and HIV/AIDS centres at university campuses throughout the country.

The ACTS model indicates the A, or the access patients need for HIV testing; C, the consent of patients for the test; T, the test with the most practical procedure and the delivery of results in person or by phone and, when needed, S, or support for those tested to obtain the treatment and prevention services they need. The ACTS model is used because many vulnerable clients pass through the health care system without ever being tested since conventional counselling and testing are “cumbersome and time consuming” (ACTS, 2004). Therefore a routine test is offered now to increase the number of people going for HCT.
HCT is considered an important tool because people who are unaware of their HIV-status are major drivers of new infections. Moreover earlier detection of HIV-infection gives people infected with HIV/AIDS speedier access to support systems to help cope with the negative consequences of the disease (Swanepoel, 2008). Despite the fact that pro-HCT messages have been part of national HIV/AIDS campaigns (Khomanani/ Lovelife) the low uptake suggests they have not been optimal in persuading those at risk (Swanepoel, 2005).

In 2011, Health Minister Aaron Motsoaledi announced that 11.9 million people get tested for HIV each year (UNAIDS, 2012). South Africa has recently had one of the largest increases in treatment access in the world, an astonishing 75% between 2009 and 2011 (Avert, 2013). Therefore research into campaign material with regards to HCT is important to persuade more people of going into HIV counselling and testing.

2.5 SOUTH AFRICAN HEALTH PROMOTION CAMPAIGNS

Health promotion campaigns attempt to improve quality of life by means of education about conditions beneficial to both health and the environment (Bertens et al, 2008). With regard to HIV/AIDS, “mass media campaigns promoting HCT form a cornerstone of the efforts to curb the spread of HIV in South Africa” (Swanepoel, 2008). However HIV Counselling and Testing programmes have not been used effectively to support prevention ones (Swanepoel, 2005). Earlier research by Swanepoel (2008: 90) showed that the focus of analysis of HCT campaigns in South Africa mainly looked at problems at the policy, infrastructure and provisions levels. He stated that little research had been done on how the process followed the design of the campaign material and choices in content.

According to Yzer (2008) the “complexity of HIV prevention in large part reflects the great diversity of populations that might be at risk for HIV infection”. He states that there cannot be a universal template for intervention efforts, because each population is unique and thus a “one-size-fits-all approach” (Yzer, 2008) has been rejected. Thus it is challenging to optimise the correspondence between intervention and the needs of the target group. Additional information on the South African situation and target groups is needed to make these insights applicable (Hoeken and Swanepoel, 2008).

Few campaigns target students. Swanepoel et al. (2008) tested the HEAIDS brochure “get tested for HIV”, and their research showed that the brochure did not have the desired effect on its readers. The HEAIDS health promotional campaign material with regard to HIV Counselling and Testing targeted students specifically. Other campaigns aimed at students are Khomanani and Lovelife, both of which inform youth about HIV/AIDS and testing. Despite pro-HCT messages being part of the national HIV/AIDS campaigns (Khomanani, HEAIDS and LoveLife), the low uptake (only 23%) suggests they have not been optimal in persuading those at risk.
The question that arises is what can be done to optimise the efficacy of communication interventions in persuading those at risk to undergo testing. Moreover it can be hypothesised that the limited impact of the interventions can be ascribed to the design of content not being supported by “adequate, theory-driven research on the contextual and personal determinants of HCT uptake behaviour of their audiences” (Swanepoel, 2005). Available studies on the determinants of student decision-making about HCT suggest that they often hold the belief that in their case an HIV-test would be no more than a redundant inconvenience. Despite high levels of unprotected sex, many students seem optimistic about not having been exposed to HIV (Swanepoel, 2008).

2.6 PERSUASION, ATTITUDE AND BEHAVIOUR

This research focuses on the persuasion of South African students at risk of HIV to voluntary present themselves for HIV Counselling and Testing. Therefore persuasion plays a central role in the form of addressing the audience. The efficacy of the HCT campaign brochures is impeded by the inefficacy of communication interventions; the content of those messages does not persuade the target group to go for HCT.

Persuasion matters to encourage changes of intention, attitude and ultimately behaviour. “The ultimate goal of persuasion is the modification of behaviour, achieved through a process of attitude change” (O’Keefe, 2002:5). Without being submitted to a sharp-edged definition of persuasion, a couple of features can be identified. The notion of success can be obtained from the concept of persuasion, noted as a successful attempt at influence (O’Keefe, 2002). Furthermore it entails some level of intention to reach a goal. The difficulty of persuasion lies in its third feature, namely the factor of freedom on the part of the persuadee. These features cannot be successful without communication. Lastly, a change in mental state of the persuadee is essential, and forms a precursor to a change of mindset (O’Keefe, 2002: 4). In persuasion theory and research, the relevant mental state has most commonly been characterised as an attitude (O’Keefe, 2002). These features of persuasion can all be applied to the present study: by means of HCT campaign brochures the goal of persuading South African students to voluntary submit to HCT can be reached through successful communication.

Attitude has been considered a key mental state relevant to persuasion because of a presumed relationship between attitudes and actions (Persuasion and actions:16). According to Eckes and Six (1994) in O’keefe (2002) attitude and behaviour are generally consistent. Therefore attitude can offer an understanding of variation among individuals in their social behaviour. However it must be noted that attitudes and actions are not always consistent and therefore persuading people to act in a manner consistent with their attitude is of importance. A student who has a desirable attitude towards HIV testing still needs to be induced to act on this view.

“Although attitude has been seen as the key mental state relevant to persuasive effects, sometimes the focus of a persuasive effort will be some determinant of attitude such as a belief” (O’Keefe, 2002:23,24). The theoretical framework of this research, the Integrative Model of Behavioural Prediction, focuses on these determinants of behaviour.
2.7 INTEGRATIVE MODEL OF BEHAVIOURAL PREDICTION

Voluntary Counselling and Testing (VCT) programmes are regarded as an important strategy in the management of the HIV/AIDS pandemic worldwide. “Such programmes, however, often have limited success due to various problems such as the existence of attitudes and beliefs that act as psychosocial barriers” (Van Dyk & Van Dyk, 2003). “Given the critical role that human behaviour plays in the spread of HIV, message-based interventions that influence people’s feelings, thoughts and actions concerning HIV have been proposed as important tools in the struggle against HIV” (Yzer, 2008).

Fishbein’s and Yzers’ (2003) Integrative Model of Behavioural Prediction (IMBP) makes a number of clear predictions about the variables that could be of importance in students’ decisions whether or not to undergo HCT (Swanepoel et al, 2008: 91). The study of Broersma & Jansen (2012) discussed the beliefs that should be addressed in HCT campaign messaging. Their study showed how a theoretical framework such as the Integrative Model of Behavioural Prediction could be used for decisions on content in HCT messaging.

2.7.1 DETERMINANTS OF BEHAVIOUR

The Integrative Model of Behavioural Prediction pictured above can be divided into several variables and steps that underlie the process of behavioural change. The most immediate determinant of behaviour is a persons’ intention to perform the specific behaviour. Intention, in turn, is viewed as influenced by the three global perceptions attitude, perceived norm and self-efficacy. The importance of these predictors varies among different behaviours.
The global beliefs summarise specific beliefs about the behaviour (Yzer, 2008). These underlying beliefs are respectively the outcome beliefs underlying attitude; normative beliefs underlying perceived norm; and efficacy beliefs underlying self-efficacy. Distal variables may be of influence on intention and behaviour, such as contextual background and personal traits.

2.7.2.1 BEHAVIOURAL INTENTION

The Integrative Model of Behavioural Prediction indicates that behavioural change is the result of changes in beliefs about performing a specific behaviour. Behaviour can be predicted by the intention of a person, whether he or she has the skills and ability to perform the behaviour and possible environmental constraints.

2.7.2.2 PROXIMAL VARIABLES

A person’s intention to exercise a specific behaviour is predicted by three global perceptions, namely attitude, perceived norms and self-efficacy. Before making communication messages, it is important to recognise which variables determine intention. Behaviour may be more attitudinal driven or rather driven by feelings of self-efficacy or perceived norm. Therefore global perceptions do not have the same weight in determining intention. However according to Fishbein & Yzer (2003) they are the most important predictors of behaviour.

Attitude is one of the three global perceptions that influences intention and entails beliefs about the likelihood that certain behaviour results in good or bad outcomes. The second global perception is the perceived norm and indicates how much a person takes note of others in performing a specific behaviour. The third and last global perception is self-efficacy, which entails a person’s belief in being capable of performing a specific behaviour.

2.7.2.3 UNDERLYING BELIEFS

The global perceptions of attitude, perceived norm and self-efficacy are predicted by underlying beliefs, the so-called proximal variables and most important predictors of intention and consequently behaviour (Broersma & Jansen, 2012). The underlying beliefs of the first global perception are the outcome beliefs and their evaluations. Perceived norm is predicted by the normative beliefs and motivations to comply. Normative perceptions are “viewed as a function of the level of expected support” from significant others (Yzer, 2008). Lastly, efficacy beliefs are “a function of perceived capability in specific challenging circumstances” and underlie beliefs of self-efficacy, the belief whether the person will be able to perform the behaviour.
2.7.2.4 DISTAL VARIABLES

The model also shows more individual difference variables, the so-called distal variables. These variables may play an indirect role in influencing behaviour, and should be reflected in the underlying belief structure (Fishbein & Yzer, 2003). The following variables were taken into account with the idea that they might prove to be relevant distal variables: the perceived severity of HIV/AIDS, the perceived susceptibility to HIV/AIDS, fear of inappropriate behaviour of medical staff, stigmatising attitude towards PLWHAs, knowledge about HIV/AIDS and past behaviour.

2.8 CONTENT AND FORMAT

The effectiveness of HCT campaigns in South Africa needs to be improved. The research of Broersma and Jansen (2012) already proved that the current guidelines used in mass campaigns are optimally effective in persuading the audience. However earlier studies into message-effect theories have given elements to build upon, such as theory on the use of testimonials (Loohuis, 2007) or Brosius and Bathelt’s (1994) work on exemplars.

This chapter focuses on the content and format of the brochure design. The basis of the content of the brochures lies within the guidelines of SANAC for version 1, whereas version 2 is based on the findings of Broersma and Jansen (2012) with regard to beliefs. To make health messages more effective, a format on narrative theories and exemplars was designed (Broersma and Jansen, 2012). Later, theory on persuasive strategies, effectiveness of narratives, involvement, use of exemplars and desert heuristic are discussed.

2.8.1. PERSUASIVE STRATEGIES

“Persuasive messages typically offer evidence to produce attitude change” (Han & Fink, 2012). Persuasion in HCT brochures is a necessary asset that can be implemented using different strategies to persuade target groups to undergo HIV testing. Research into the use of narratives and statistical information, found support for both message types in gaining persuasive advantage (Han & Fink, 2012). The use of narratives refers to anecdotal or personal evidence, such as exemplars, testimonials, stories and interviews. Statistical information provides numerical, quantitative information. According to Brosius & Bathelt (1994), “exemplars can even be a more powerful tool than the use of factual statistical information”. Brosius & Bathelt (1994) demonstrate the influence of exemplars on the estimation of frequencies. Their research proves that giving statistical information is less powerful than the use of respondents as examples. Respondents estimated the percentage of pros and cons parallel to the proponents and opponents seen in interviews, even contradicting factual statistics (Hoeken, Hornix & Hustinkx, 2009). The use of factual information may therefore be less persuasive in HCT messages than exemplars for the topic of HIV/AIDS.
Although previous research has shown that narrative evidence is more persuasive than statistical evidence (e.g. Brosius & Bathelt, 1994), there is also research that states the opposite (Han & Fink, 2012). Han & Fink (2012) state that according to Allen et al. (2000) the combination of using narratives and statistical information is more persuasive than using statistical information alone. However, they do not state whether the combination of these two methods was more persuasive than the use of a narrative message alone. Han & Fink (2012) propose that the amount of evidence boosts the persuasiveness of statistical messages, whereas perceived vividness enhances the persuasiveness of narrative messages. Using statistical evidence together with a vivid narrative is therefore highly recommended.

Kahneman and Tversky (1973) explored rules determining evidential information. People appear to prefer judgmental heuristic representativeness as evidence instead of the logic of statistical information, reliability of evidence and consideration of the probability of outcome. Using representativeness in exemplars may therefore enhance the likelihood of readers being persuaded. These results counter the argument on the value of using statistical information. However there are two reasons to take statistical information into account as a powerful persuasive tool: the research of Kahneman and Tversky (1973) emphasised the theory of prediction instead of persuasion and they found evidence that “the use of numerical heuristics for individuals yields reasonable judgments”. Numerical heuristics may also account for persuasive messaging. Han & Fink (2012) state that a certain amount of evidence functions to the advantage of statistical messages. Moreover according to O’Keefe (2002) the amount of statistical evidence may, in general, boost the persuasive effect of messages.

### 2.8.2 Effectiveness of Narratives

The effectiveness of a narrative relies in the affective aspect of its form to be persuasive. Green and Brock (2000) proposed that the persuasive impact of a narrative is based on a so-called state of transportation that enhances the susceptibility towards information provided by the narrative, whether fictional or not. The transportation-imagery model of Green & Brock (2000) explains the processes that occur when a reader encounters a text, and proposes a mechanism whereby narratives can affect beliefs. To the extent that individuals are absorbed into a story or transported into a narrative world, the effects of the story may impact their real-world beliefs (Green & Brock, 2000). A distinction must be made between elaboration, according to Petty and Cacioppo (1981), and transportation. The latter may lead to persuasion through mechanisms other than the amount of thought an individual devotes to a message. Transportation does not lead to attitude change through logical consideration and evaluation of arguments (Green & Brock, 2000), but rather it creates strong narratives whose experiences influence the reader’s beliefs. Elaboration may lead the individual to think elaborately about arguments or less elaborately through heuristic cues and activate personal thoughts about experiences to evaluate the message. Transportation however can distract the individual from experiences and opinions evaluating the information at hand and transport the person into another narrative world to influence beliefs the individual holds. By being involved with the narrative, persuasion can be enhanced.
Therefore the use of narrative stories, whether fictional or not is used as a functional tool of persuasion. Although the use of elaboration through logical consideration—proposed by Petty and Cacioppo—may lead to different effects, its value lies in the effects of the amount of evidence interacting with involvement to enhance persuasion (Han & Fink, 2012).

**2.8.3 INVOLVEMENT**
In accordance with the research of Petty & Cacioppo (1981) familiarity and involvement are relevant to the perceived persuasiveness of and attitudes toward a message (Han & Fink, 2012). Although it is difficult to influence reader involvement with HCT—they either have low or high involvement with the topic—the format and content of the brochure may use involvement as an effective tool. The exemplar character may display a high level of involvement, setting an example for the reader. Using narratives to tell about their life situations that might be similar to the experiences of most South Africans can enhance familiarity with the character’s story and consequently the topic the narrative presents. Many people in South Africa are living with HIV and AIDS; it is impossible for people who read the brochure to not know at least someone living with the virus. Therefore, by changing living situations using more narratives, the chances to address the reader’s life situation increase.

**2.8.4 SOCIAL VALIDATION**
Cialdini (1993) in O’Keefe (2002) proposed the use of validation to enhance persuasiveness. This entails the social aspect of following the opinion of the majority. The more exemplars being used where characters voice a certain opinion or take a certain action— in this case, going for HCT—the more likely that this opinion will be regarded as a norm. Involvement and social validation are two concepts that can be combined in the design of HCT promotion messages. The emphasis lies on the use of multiple exemplars, because a single additional story will not enhance persuasiveness substantially.

**2.8.5 USE OF EXEMPLARS**
An exemplar is defined in the relevant literature as an example of history. It is characterised by a vivid, narrative form in which one or more individuals are presented to illustrate specific consequences of a measure (Hoeken, Hornikx, Hustinx, 2009). An exemplar is set to be representative for the bigger picture. With regard to HIV Testing and Counselling the use of exemplars may lead to an individual being made responsible for the situation in which he or she finds him or herself. Depending on how the character contracted HIV in the example, according to research (Hoeken, Hornikx, Hustinx, 2009) the character’s story will be translated by readers into a whole similar group of people. Using such an example is therefore a powerful tool to influence people’s view on certain matters. Han & Fink (2012) postulate that the effectiveness of narratives relies in the affective aspect of its form to be persuasive, because they can stimulate and evoke emotions. Hoeken, Hornikx and Hustinx (2009) propose to use exemplars with a person speaking instead of cited exemplars. The latter is less effective in persuading the reader. The character however, must meet the characteristics, behaviour or activities of the target group. Identification with the characters in the story enhances the persuasion of the message. In this study, using students as speakers is therefore required.
This corresponds with Kahneman & Tversky’s (1973) judgmental heuristic of representativeness. Moreover according to Hoeken, Hustinx & Hornix (2009) exemplars have a strong influence on probability estimation. By using the mechanism of exemplars, higher probability estimation on the part of the reader can be reached. Thus using individuals who could live a happy and healthy life after testing HIV positive as examples can influence the reader’s belief and estimation of the probability of this outcome. A comparison with an individual who did not go for testing could also be used, focusing on a more disadvantageous outcome. Another aspect mentioned by Hoeken et al. (2009) is the concreteness of storytelling. Making a story more concrete makes it easier to develop an opinion about the story.

2.8.6 DESERT HEURISTIC

According to Hoeken, Horniks & Hustinx (2009), guilt is an important aspect to take into account when formatting exemplar content. The research of Croonen, Jansen & de Stadler (2005) refers to the ‘desert heuristic’, meaning that if people are to blame themselves for contracting HIV, they may believe they do not deserve support. As Broersma & Jansen’s (2012) research results indicate, a stigmatising attitude towards People Living with HIV/AIDS (PLWHA) is negatively related to HCT intention. Hence people stigmatise others for having contracted HIV/AIDS and moreover provide less or no support when the other is to blame. Social validation can be used to combat to this problem. Exemplars can portray more levels of responsibility and perceived susceptibility, to show indifference for individuals to go for HIV testing. Using narratives describing HIV testing as a commonality may influence readers’ belief and consequently change their intention to go for HIV testing. An interesting finding of Croonen et al. (2009) is that both the belief that people living with HIV/AIDS are responsible for their infection and the willingness to support PLWHAs proved to be clearly related to the perceived realism of the brochure and the example used. Realism is therefore a powerful tool used in exemplars.
3. METHOD

This study aimed to discover the effects of two versions of a HCT promotion message that persuades South African students to go for HIV Counselling and Testing. Version 1—modelled after a Khomanani brochure—corresponded with the SANAC guidelines and version 2—created on the basis of research by Broersma & Jansen (2012) titled “Why should I?: On selecting the content of persuasive HIV counselling and testing messages for students at a previously disadvantaged university in South Africa”—targeted the beliefs that were found to be most relevant for African South African students in going for HCT.

Furthermore the study attempted to provide insight into how African South African and non-African South African students may react to these two versions of the brochure. Hence the present study sought to determine whether a distinction between groups with a varying cultural background is necessary for the further development of HCT promotion campaigns.

Therefore knowledge derived from the research carried out by Broersma and Jansen (2012) was used to design a questionnaire. Their research survey was based on the variables of the Integrative Model of Behavioural Prediction and showed the necessity to use this model for predicting planned behaviour.

Two brochure versions were developed based on the existing brochure titled “Your Relationship—taking it into the next level” launched by Khomanani, a youth campaign focused on the prevention of HIV, initiated by the government through the Department of Health (DOH). Both versions were given to students of Stellenbosch University with different cultural backgrounds, and their reactions were measured subsequently. In the following chapters more detail is given with regard to the participants of the survey, material, pre-testing of the materials, experimental design, and procedure and data analysis.

3.1 RESPONDENTS

The participants in this research were selected at Stellenbosch University (SU) in Stellenbosch, South Africa. To obtain a representative sample of students from SU, respondents of different ages, gender, ethnicity and study were targeted. The study focussed on the four ethnic groups: Indian, African, White and Coloured. Because this study is partially based on finding of beliefs from one specific group, namely African South African students, a differentiation was made between African South African and non-African South Africans; hence the non-African South African group was composed of Indian, White and Coloured students.
The respondents were approached through e-mail and directed to an online questionnaire. The survey was developed in the online questionnaire tool ThesisTools. Answers were retrieved automatically from ThesisTools and therefore anonymity was guaranteed. Only surveys that were completely filled out could be submitted and consequently none of the questionnaires had to be excluded from the data analysis due to lack of answers. Two surveys were excluded however, because the respondents answered ‘I strongly agree’ to every question.

A total of 163 students from the University of Stellenbosch participated in this research: 62 African students (38%) and 101 non-African students (62%). 30 African students were presented with version 1 of the brochure; the other half of the group—32 African students —read version 2: a brochure according to findings of Broersma and Jansen (2012); the same set up was applied to the non-African students. 55 non-African students were presented with the first version and the other 46 non-African students read the second version. The sample comprised 163 participants included 66 males (40.5%) and 97 females (59.5%). 43 males and 42 females were targeted with the first version. However, the amount of males that read the second version as compared to females differed, 23 males (29%) and 55 females (71%). The average age of the respondents was 22, with the minimum age being 17 and the maximum 43.

There was a wide range of study backgrounds, a variation of 23 educational programmes of which Engineering (9.2%) the Humanities (8.6 %) and Education (7.4%) formed the largest groups. The sample included a variation of 9 different languages comprising the mother languages of the 163 students at the Stellenbosch University. This showed a group with varying cultural backgrounds; although 55.2% spoke Afrikaans and 27.6% used English as their native language.

3.2 MATERIALS

Two materials were used to research how campaign health messages could be made most effective in persuading South Africans to undergo HIV testing. A questionnaire was developed based on the illustrated model of this research, the IMBP, which is used for collecting the right content message. Two manipulated versions of an existing Khomanani brochure were developed to measure the guidelines of SANAC against suggestions of Broersma and Jansen (2012). By means of the questionnaire survey the reactions to the two brochure versions could be measured.
3.3 QUESTIONNAIRE

The questionnaire addressed all South African students of Stellenbosch University and included questions about the brochure they read (how readable, attractive, persuasive etcetera, they found the brochure) their cultural background, the effect of the brochure on a persons’ HCT intention and the perceptions and beliefs underlying this intention.

The questionnaire was structured in accordance with the variables of the IMPB and followed the structure of the model with questions measuring behavioural intention; the three global perceptions, i.e. attitude, perceived norm and self-efficacy; underlying beliefs, i.e. outcome beliefs, normative beliefs and efficacy-beliefs; and distal variables, i.e. perceived susceptibility, perceived severity, fear of medical staff, stigma and knowledge.

The questionnaire was largely the same as the one used by Broersma and Jansen (2012). Several variables in their research proved to be related to HCT intention. These variables were the students’ belief that their parents would approve of their going for HCT; the fear and stress they may expect to experience when going for HCT; their self-confidence in dealing with a possibly disadvantageous outcome of an HIV-test; their possible stigmatising attitude towards people living with HIV/AIDS and their perceived susceptibility to HIV/AIDS (Broersma and Jansen, 2012). Beliefs that proved to be related to HCT intention for African South African students may be applicable to non-African South Africans as well.

The items added by Broersma and Jansen (2012) as distal variables were based on earlier research of Boshamer and Bruce (1999), Van Dyk and Van Dyk (2003), Kalichman and Simbayi (2003) Birdsell, Hajiyannis, Nkosi and Parker (2004), Swanepoel (2005), Verheij and Jansen (2010) and Swanepoel et al. (2008), since they might prove to be relevant variables. Therefore perceived susceptibility, perceived severity, fear of inappropriate behaviour of medical staff and knowledge about HIV/AIDS were also included in the questionnaire.

Furthermore, respondents were asked for their demographic information such as gender, ethnicity, highest degree completed, field of study, mother language, second language and also their past behaviour to get background information. To get a complete view on factors that could be of influence on behavioural intention, past behaviour was also taken into account.

A Likert-scale was used to measure participant responses. The responses were scored on a 5-point scale. By means of this method, the intensity of feelings of respondents in agreeing to a statement was measured. The scale ranged from 1- ‘I strongly disagree’ to 5- ‘I strongly agree’. A different measure was used for the questions measuring knowledge about HIV/AIDS. These questions could only be answered by means of yes, no, or I don’t know. Past behaviour was measured on an ordinal scale where respondents had to indicate whether they went for HCT before and if they had done it more than once.
The variables and structure of the IMBP are discussed below, starting with the global perceptions and their underlying beliefs and the order in which questions appeared. Some items were added to the questionnaire (compared with the one of earlier research by Broersma and Jansen (2012)) or were formulated differently based on results from questionnaire pretesting. In the next sections it is mentioned where items were added or formulated differently. The survey is divided into sections A through H, 8 in total.

Section A focuses on personal information; section B targets past experience; section C measures behavioural intention, attitude and its underlying beliefs; section D concerns perceived norms and its underlying beliefs; section E targets self-efficacy and underlying beliefs; section F focuses on distal variables; section G includes questions about HCT knowledge and section H is used for measuring the readability, structure, attractiveness and content of the brochure. Before students could respond to the survey they were presented with an introduction, in which the purpose and procedure of the research were established. Further, the risks and benefits of participating were clarified. The questionnaire and explanation complied with Stellenbosch University’s informed consent template.

Section A
The first section of the research consisted of items measuring personal information: age, ethnic group, gender, highest educational degree completed, field of study and languages used.

Section B
The second section consisted of one item measuring past behaviour with regard to HIV Counselling and Testing, the question ‘have you ever taken an HIV test?’ This question was added to the questionnaire and was taken into account as a possible influencing factor. It could influence the intention to go for HCT. The question could be answered with a ‘no’, ‘yes once’ or ‘yes more than once’. In further analysis this variable was computed into a new variable taking the two answers ‘yes once’ and ‘yes more than once’ together, because then people who had and people who had not been tested could easily be measured.

Section C
The third section was comprised of questions with regard to behavioural intention (the final state according to the IMPB to reach the desirable behaviour), the global perception attitude and the underlying beliefs of attitude, the so-called outcome beliefs.

Behavioural intention
The question ‘I will take an HIV test within the next three months’ (question 9) was used to indicate students’ intention to go for HCT.
Attitude
Three statements, with a high internal consistency (α= .86), were used to measure attitude, questions 10 through 12: ‘HCT is useful’, ‘it is wise to go for HCT’ and ‘it is important to go for HCT’.

Outcome beliefs
The same questions applied by Broersma and Jansen (2012) were used to measure the outcome beliefs. Eight statements measured these beliefs, in questions 13, 14, 15, 16, 17, 18, 19 and 20. Questions 19 and 20 were re-coded so that high scores indicated a positive attitude towards HCT and low scores indicated a negative belief. The statements for measuring the outcome beliefs could underlie the attitude towards going for HIV Counselling and Testing. Eight items measured the outcome beliefs: ‘should I test HIV positive, I can learn to accept that’, ‘should I test HIV positive, I will manage to consistently take anti-retroviral medicine for the rest of my life’, ‘should I test HIV positive, I expect that I will be able to cope with the physical side-effects of anti-retroviral medicine’, ‘should I test HIV positive, I am able to plan a good future for myself’, ‘should I test HIV positive, I believe I will still be able to realise my dreams’, ‘should I test HIV positive, I fear that I will be stigmatised and discriminated against’ and ‘should I test HIV positive, I fear that I will be rejected by my loved ones’. The last two items were re-coded, such that high scores indicated a positive outcome belief and low scores indicated a negative outcome belief. The score of all items taken together proved that these items essentially asked the same question (Cronbach’s alpha= .82).

Section D
The fourth section was composed of items measuring perceived norm and underlying beliefs.

Perceived Norm
In accordance with research of Broersma and Jansen (2012) one statement measured perceived norm ‘People who are important to me think it is good to go for HCT’.

Normative beliefs
To measure the normative beliefs, an additional question was included with regard to normative beliefs of parents, friends, family and the community. A question concerning the beliefs of partners was included.

Five items measured the normative beliefs underlying perceived norm (questions 21 through 26). These beliefs measured the extent to which students thought significant others opined about going for HCT. The questions ‘my partner thinks it is good to go for HCT’, ‘my parents think it is good to go for HCT’, ‘My friends think it is good to go for HCT’, ‘my family thinks it is good to go for HCT’ and ‘my community thinks it is good to go for HCT’ were included.
It should be noted that some students did not have a partner. Therefore the questions with regard to beliefs about or of a partner included an additional option ‘I don’t have a partner’. This meant that students, who did not have a partner, crossed ‘I don’t have a partner’, instead of ticking a box in the scale that ranged from ‘I strongly disagree’ to ‘I strongly agree’. They could not enter both options on the scale ranging from 1-5 and ‘I do not have a partner’. The two items that included a question about a partner were programmed in SPSS as a missing variable. Because of that, only the beliefs of students with a partner were measured.

Section E
This section measured the self-efficacy of participants concerning their capability of going for HCT and the underlying efficacy beliefs.

Self-efficacy
Three statements (questions 27, 28 and 29) were used to measure the global perception of self-efficacy, e.g. ‘I think I am physically able to go for HCT’ and ‘I think I can easily go for HCT without pressure of my environment’ and ‘I think I am psychologically able to go for HCT’. The research of Broersma and Jansen included one question to measure self-efficacy, namely ‘I think I would be able to go for HCT’. This could be a physical, psychological or environmental ability. Cronbach’s alpha showed a high communality of $\alpha = .86$.

Efficacy beliefs
Two items measured the beliefs that underlie self-efficacy: the person’s belief of being able to perform the promoted behaviour of going for HCT. Questions 30 and 31 were stated as follow: ‘I would be too afraid to go for HCT’ and ‘going for HCT would be very stressful for me’. Cronbach’s alpha for the two items was $\alpha = .85$ with a high significant correlation ($r = .75$, $p<0.01$). Both questions were recoded so that high scores indicated a positive efficacy towards HCT and low scores indicated a negative belief.

Section F
All distal variables, except for knowledge, were measured in the sixth section; subsequently perceived susceptibility, perceived severity, fear of inappropriate behaviour by medical staff and stigmatising attitude towards people living with HIV/AIDS. These variables were included as indirect predictors of intention according to the IMBP. Two items (questions 32 and 33) measured perceived susceptibility ‘I am at risk of getting infected with HIV’ and ‘I am at risk of having contracted HIV’ and ($\alpha = .66$, $r = .50$, $p<0.01$). The alpha value was not acceptable and it was decided to include the two items separately.

Two items (questions 34 and 35) measure perceived severity ‘It is dangerous to get infected with HIV/AIDS’ and ‘HIV/AIDS is a very dangerous disease’ ($\alpha = .72$, $r = .59$, $p< 0.01$).
The variable of fear of *inappropriate behaviour by medical staff* was measured in questions 36 and 37, ‘should I go for HCT, I fear that the clinic staff will give my test results to other people’ and ‘If I test HIV positive, I am afraid that the medical staff will have a very negative attitude towards me when I go for medical help’ (α=.74, r=.60, p<0.01).

The distal variable of *stigmatising attitude towards PLWHAs* (people living with HIV/AIDS) was measured through two statements: ‘people who have HIV/AIDS do not have to feel guilty about this’ and ‘people who have HIV/AIDS are like everybody else’, questions 38 and 39 respectively (α=.51 r=.34, p<0.01). Both questions were recoded so that high scores indicated a high level of stigma and low scores little stigma. It was decided that the alpha value was acceptable, although it was below .6.

### Section G

Knowledge about HIV/AIDS could influence the beliefs and intention of South African students to go for HCT. Broersma and Jansen (2012) included twelve questions about causes of HIV/AIDS. After pre-testing the questionnaire to South African students (chapter pre-testing) it was decided to exclude two of these questions. The two questions ‘is HIV/AIDS caused by spiritual or supernatural forces?’ and ‘can a person get rid of HIV/AIDS by sleeping with a virgin?’ were seen as stigmatising towards the students because they were too foolish. The following ten questions were included: ‘is HIV spread by kissing?’, ‘can a person get HIV/AIDS by sleeping with a virgin?’, ‘does washing after sex help to protect you against HIV/AIDS?’, ‘can you get HIV/AIDS by touching someone else?’, ‘is HIV the virus that causes AIDS?’, ‘is there a cure for AIDS?’, ‘can you see if someone has HIV/AIDS by looking at him or her?’ and ‘can medicine prolong the life of someone with HIV/AIDS?’.

In contrast to the Likert-scale method, the questions measuring knowledge had to be answered ‘yes’, ‘no’ or ‘I don’t know’. Only a right answer could bring in a point. Logically the higher the score (with a minimum of 0 and a maximum of 10), the more knowledge a student had about HIV/AIDS.

### Section H

The last section of the questionnaire was focused on the two versions of the original Khomanani brochure. The questions formulated as statements could be filled out on a Likert-Scale from 1 ‘I strongly disagree’ to 5 ‘I strongly agree’. Several aspects of the brochure were asked about. Five items (questions 50, 51, 52, 53 and 54) focused on the content and structure of the text: ‘the text is easy to understand’, ‘the information in the text is clear’, ‘the text of the brochure is to the point’, ‘the structure of the text is logical’ and ‘the text is well-organised’ (α=.87) These statements were followed by more content-specific questions with regard to the reality of testing. Questions 55-58 were ‘this brochure gives me useful tips for living with HIV’, ‘this brochure shows the reality of testing’, and ‘this brochure shows the reality of living with HIV’ (α=.81)
The persuasive power of the content in the brochure was tested with questions 59-63 which focused on the themes addressed by the brochure about HIV/AIDS, namely ‘this brochure prepares me mentally for taking an HIV-test’, ‘this brochure convinces me to go for HCT’, ‘this brochure convinces me that I can also be at risk for contracting HIV’, ‘this brochure convinces me that I am capable of going for HCT and dealing with a possible disadvantageous outcome’, ‘this brochure shows me how to deal with being diagnosed HIV positive’ and ‘this brochure shows me that people living with HIV are like everyone else’. These questions showed a high Cronbach’s alpha of .83.

The last statements (questions 64-69) of section H concerned the sender of the brochure. These questions could be answered on a 5-point Likert-scale, ranging from negative adjectives to more positive adjectives, respectively unintelligent-intelligent; unprofessional-professional; stupid-bright; untrustworthy-trustworthy; dishonest-honest and not reliable-reliable. The six items showed high credibility (α=.90).
3.4 BROCHURE

This chapter describes the steps taken to arrive at the content of both brochure versions and the content based on SANAC guidelines and earlier research.

3.4.1. BROCHURE PROCESS

Two brochures were developed, based on the original Khomanani campaign material: ‘Your relationship—taking it into the next level’. The purpose of this study is to determine how to successfully develop effective HCT campaign messages. To arrive at a basis for the design of the brochure, several HCT campaign materials were taken into account, such as LoveLife’s ‘Talk about it’, HEAIDS’ ‘Get tested for HIV’, the Africa Centre for HIV/AIDS management and its brochure ‘10 reasons to test for HIV’ and CDD’s ‘HIV take charge, take the test’. The basic document had to be in accordance with HCT campaign material that addressed the SANAC guidelines.

Different HCT brochures currently distributed by HIV/AIDS centres were tested on content according to the SANAC guidelines. Two factors were important in the decision-making process. The brochure had to be distributed among and be targeted at students. Also, the brochure had to contain up-to-date information with regard to HIV/AIDS and HIV testing. Targeting the students of Stellenbosch University, it was important to know which campaign material was most accessible to them. The most widely spread and available HCT brochures on campus were the HEAIDS brochure ‘Get tested for HIV’ and the Khomanani brochure ‘Your relationship: taking it to the next level’. Although the HEAIDS brochure was more widely spread and available on the Campus HIV centre, the Khomanani brochure was chosen as a basis because it contained the most up to date information and adhered to all the guidelines mentioned by the South African National AIDS Council as seen in table 4. The vital factor was the information given in the brochure about the introduction of ART in South Africa, a development, which means that one can still live a longer and healthier life.

The SANAC guidelines used in the content of the Khomanani brochure were used for version 1—compliant with SANAC guidelines. By means of theory on format and text design and the results of previous research, version 2 —after suggestions of Broersma and Jansen (2012)— was a manipulated design the basic document, hence the Khomanani brochure. The format in which both versions were cast was based on the original Khomanani brochure.
3.4.2 BROCHURE GUIDELINES

In this chapter both the SANAC guidelines and suggestions based on the theoretical framework for HCT campaign material are discussed in detail.

SANAC guidelines

The SANAC guidelines request campaign developers to remain positive, hopeful and forward-focused [and not to] delve into questions of discrimination, stigma or confidentiality issues.

<table>
<thead>
<tr>
<th>Guidelines from the South African National AIDS Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on the benefits of testing</td>
</tr>
<tr>
<td>Focus on disclosure between partners</td>
</tr>
<tr>
<td>Message remains positive, forward-focused and hopeful</td>
</tr>
<tr>
<td>Message must not delve into questions of discrimination</td>
</tr>
<tr>
<td>No stigmatisation of people living with HIV/AIDS</td>
</tr>
<tr>
<td>Message must not delve into questions about confidentiality issues</td>
</tr>
</tbody>
</table>

The current brochures address themes in accordance to these guidelines. Especially the aspects of not mentioning stigma and being forward-focused are emphasised in campaign messages.

Previous research Broersma & Jansen

It is recognised by previous research into health communication interventions that the Integrative Model of Behavioural Prediction is particularly useful for interventions that aim to develop and strengthen intentions to perform a recommended behaviour (Fishbein & Yzer, 2003). Broersma & Jansen (2012) laid down the basis for the present study. They indicated themes that needed to be addressed in promotion messages, which proved to be relevant for HCT intention among African South African students in Limpopo. The South African National AIDS Council however does not mention them in their outset guidelines. When addressing these themes, HCT promotion messages may contribute positively to students’ HCT decisions. Table 1 portrays guidelines in accordance to the South African National AIDS Council and table 2 shows the results derived by Broersma and Jansen (2012).
Table 2: Results of Broersma & Jansen (2012).

<table>
<thead>
<tr>
<th>IMBP Variable</th>
<th>Belief</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normative beliefs</strong></td>
<td>Belief of parents approve of going for HCT</td>
<td>‘My parents think it’s good to go for HCT’</td>
</tr>
<tr>
<td><strong>Outcome beliefs</strong></td>
<td>Coping expectation: fear and stress expected when going for HCT</td>
<td>Should I test HIV-positive, I expect: ‘I will manage to consistently take anti-retroviral medicine for the rest of my life’ ‘I will be able to cope with the physical side effects of anti-retroviral medicine’ ‘I will still be able to realise my dreams’ ‘I can learn to accept that’ ‘To be able to take care of myself’ ‘To be able to plan a good future for myself’ ‘I fear that I will be stigmatised and discriminated against’ ‘I fear that loved ones will reject me’</td>
</tr>
<tr>
<td><strong>Efficacy beliefs</strong></td>
<td>Confidence in going for HCT: in respect of dealing with a disadvantageous outcome</td>
<td>‘I would be too afraid to go for HCT’ ‘Going for HCT would be very stressful for me’</td>
</tr>
<tr>
<td><strong>Distal variable Stigma</strong></td>
<td>Their possible stigmatising attitude towards PLWHAs</td>
<td>‘People who have HIV/AIDS have nothing to feel guilty about’ ‘People who have HIV/AIDS are like everybody else’</td>
</tr>
<tr>
<td><strong>Distal variable Perceived susceptibility</strong></td>
<td>Their own perceived susceptibility of getting HIV</td>
<td>‘I am at risk of getting infected with HIV’</td>
</tr>
</tbody>
</table>

As can be seen comparing table 1 and 2, the outset guidelines differed between the SANAC and the results of previous research. Based on Broersma & Jansen (2012), some variables needed to be included in HCT campaigns, respectively coping expectation, confidence in going for HCT, stigma towards people living with HIV (PLWHAs) and perceived susceptibility. Although the variable of perceived norm of the students’ belief that their parents would approve of their going for HCT had a significant effect on intention to go for HCT, this variable was not addressed in the brochure. It is difficult, if not impossible, to address parents’ belief, since not all parents will share the same beliefs with regard to HIV testing. Nevertheless, this research focused on the specific target group students. Therefore targeting parents as a predictor of intention could not be addressed by designing a brochure according to these beliefs.

Some items measured the concepts of coping expectation, confidence in going for HCT, stigma towards PLWHAs and perceived susceptibility. Coping expectation entails students being able to deal with the consequences of testing HIV-positive. The items measuring coping expectation presented questions about future perspectives, medicine use and side-effects, taking care of oneself and learning to accept living with HIV.
Although SANAC does not set out guidelines to adhere to these aspects, according to Broersma & Jansen (2012) these are important factors to address in HCT brochures. Moreover, according to their research, students needed to be motivated and have confidence to get tested with the fear and stress they might expect when going for HCT.

According to previous research, the distal variable of stigmatisation was negatively related to coping expectation, contributed negatively to confidence in going for HCT and had a significant effect on HCT intention. The items of beliefs about guilt that people living with HIV should feel and the belief about their being the same as everyone else were included. Hence students’ own possible stigmatising attitude towards PLWHAs had a significant effect on HCT intention. As indicated by the article of Broersma & Jansen (2012) students’ perceived susceptibility of being at risk of getting infected with HIV was an indicator of intention.

Based on the theory and conclusions of Broersma & Jansen with their use of the Integrative Model of Behavioural Prediction (2012), the variables in table 3 needed to be addressed in HCT intervention brochures to enhance persuasion. Table 3 is divided into three columns: aspect, content and translation, respectively. Aspect presents the factors that need to be assimilated in the brochure; content explains what the aspect entails and translation proposes options to process the aspect into the design of the brochure.
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Content</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical information</td>
<td>• Amount of statistics increases persuasiveness</td>
<td>• Statistical information as fact sheet in combination with exemplars to enhance persuasiveness</td>
</tr>
<tr>
<td>Exemplars</td>
<td>• Vividness</td>
<td>• Students as narratives</td>
</tr>
<tr>
<td></td>
<td>• Representative narrative for the whole target group</td>
<td>• One person's lifestyle, characteristics and behaviour that can be generalised for the whole similar group</td>
</tr>
<tr>
<td></td>
<td>• Transportation Theory</td>
<td>• Strong narrative telling from own experience instead of talking about a characteristic</td>
</tr>
<tr>
<td></td>
<td>• Familiarity &amp; Involvement</td>
<td>• Different descriptions of life situations that reflect the one of the target group to increase involvement &amp; familiarity</td>
</tr>
<tr>
<td></td>
<td>• Variance of different life situations &amp; people</td>
<td>• Voicing a majority and examples of people depicting going for HCT as a norm</td>
</tr>
<tr>
<td></td>
<td>• Social validation following the opinion of the majority of people</td>
<td>• The story must be told specifically</td>
</tr>
<tr>
<td></td>
<td>• Concreteness</td>
<td></td>
</tr>
<tr>
<td>Coping expectation</td>
<td>• Fear &amp; stress expected when going for HCT</td>
<td>• Being able to cope with physical, psychological disadvantages of HCT and when testing positive being able to deal with the disease and live a loving, healthy life. Mentioning other groups with HIV and communities and exemplars of people with a successful future with HIV</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>• Confidentiality of medical staff</td>
<td>• Mention [by use of general text] that counselling and testing is confidential</td>
</tr>
<tr>
<td>Efficacy beliefs</td>
<td>• Confidence in going for HCT with respect of dealing with disadvantageous outcomes</td>
<td>• Combination with coping expectation to mention stress and fear as being normal feelings and how to deal with them</td>
</tr>
<tr>
<td>Stigma</td>
<td>• Stigmatising attitude towards people living with HIV/AIDS</td>
<td>• Misunderstanding of sexually different people or of wrong behaviour</td>
</tr>
<tr>
<td>Perceived susceptibility</td>
<td>• Susceptibility of being at risk of contracting HIV/AIDS</td>
<td>• Mention of misunderstanding that the chances are slim that the reader may contract HIV. It can also happen to the reader</td>
</tr>
<tr>
<td>Probability estimation</td>
<td>• Probability estimated by readers</td>
<td>• Using probability estimation. The more examples of people contracted with HIV dealing with the disadvantageous outcomes, the higher readers estimate the probability.</td>
</tr>
</tbody>
</table>

Table 3: Variables to include in the design of persuasive message content and format
3.4.3 DESIGN OF THE BROCHURES

A good comparison between the two guidelines can be made, when version 1 only addresses themes in accordance with the SANAC guidelines. No other information compliant with the suggestions of Broersma and Jansen (2012) was used in the first version. The table below shows themes that are addressed according to SANAC.

Table 4: Khomanani: Your relationship – taking it to the next level

<table>
<thead>
<tr>
<th>SANAC guidelines version 1</th>
<th>Focus on benefits of testing</th>
<th>Disclosure partners</th>
<th>Positive &amp; hopeful</th>
<th>No mention of discrimination</th>
<th>No stigma PLWHAs</th>
<th>No mention of confidentiality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘You may feel scared or unsure when you are thinking of taking the test. This is normal- it is a brave decision you are making, and it can be scary. But remember, taking the test is taking control of your own life’.</td>
<td>‘It’s better to know our status and that we are safe together’</td>
<td>‘Partners who trust one another can talk together, even about getting tested for HIV together.’</td>
<td></td>
<td></td>
<td>‘Remember also that no one can tell anyone else your results when you test. Counsellors will not tell anyone what you say them.’</td>
</tr>
</tbody>
</table>
Persuading South African students to undergo HIV Counseling and Testing through campaign brochures | Benthe Bosma

Version 1 had to comply as closely as possible with guidelines stated by SANAC, therefore the information about confidentiality issues of medical staff was excluded in brochure version 1. Although findings of Broersma & Jansen (2012) did not point out fear of inappropriateness of medical staff to be a salient determinant of HCT intention for African South African students, it may be applicable to non-African students. Since the variable of fear of inappropriateness of medical staff is measured in the questionnaire as a distal variable, version 2 targeted this belief in the brochure.

Using the original Khomanani brochure as a basic document, the difference between version 1 and 2 lies within content and format changes. Version 1, adhering to SANAC guidelines, used the same format and content as the Khomanani brochure. However, version 1 summed up the information given in the original Khomanani brochure. Version 2 was based on previous research into beliefs of African South African students and theory into document design. Therefore changes were made using the variables showed in table 3. Both brochures are included as appendix II and III respectively.

Version 2 contained more difference than mentioned above. Because changes that were made did not only address different variables, but also changes made in accordance with theory on format, it included aspects that are presented in table 3 as well.

**3.4.4. BROCHURE CONTENT**
The model below gives an overview of the second brochure version on content and format and shows which variables in accordance to Jansen and Broersma were addressed.

<table>
<thead>
<tr>
<th>Jansen &amp; Broersma guidelines</th>
<th>Version 2</th>
<th>Content</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Page 1</strong></td>
<td>Perceived severity: ‘If you don’t get treated for HIV with ARV you will get AIDS and die’</td>
<td>‘the number of new infections of HIV in SA entails 400 000 people’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived susceptibility: ‘the only way to know if you have HIV is to have an HIV test, because it takes many years’</td>
<td>‘additional statistical information:’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facts: ‘youngsters between 15-29 are the highest risk group of having HIV’</td>
<td>‘the annual number of AIDS death rates in South Africa entail 300000 people’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exemplar of Peter addressing perceived susceptibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exemplar of Kelsey addressing stigma and coping expectation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Page 2</strong></td>
<td>Perceived susceptibility: ‘as a student at a higher education institution you are in a high-risk group for HIV, ‘If you have ever had unprotected sex (anal, vaginal or oral) you are at risk of having contracted HIV’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived susceptibility: ‘my girlfriend Nita and I wanted to have sex together and both thought we could not be infected with any</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facts: ‘youngsters between 15-29 are the highest risk group of having HIV’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exemplar of Peter addressing perceived susceptibility</td>
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</tr>
<tr>
<td></td>
<td>Exemplar of Kelsey addressing stigma and coping expectation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Page 3</td>
<td>Perceived susceptibility: ‘testing for HIV is necessary when you have had unprotected sex and are unaware of your own and your partners’ HIV status</td>
<td>Exemplar addressing stigma and efficacy beliefs</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Efficacy beliefs: ‘I was very afraid of the outcome of the test and got very stressed’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Page 4 | Fear of medical staff: ‘remember that no one can share your results with anyone else when you test. Counsellors are obligated to keep your information confidential’ | No additional use of format |

<table>
<thead>
<tr>
<th>Page 5</th>
<th>Coping expectation: ‘I you tested HIV positive, you may feel concerned about living a successful life your physical condition and being able to take good care of yourself’</th>
<th>Statistics ‘more than 50% of young people are unaware of having HIV’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stigma: ‘I had a poor opinion of people living with HIV’. ‘when dealing with the disease I found a lot of support’</td>
<td>Exemplar on coping expectation and stigma</td>
</tr>
<tr>
<td></td>
<td>Coping expectation: ‘although you have to get used to taking medicine everyday, it is like taking the anti-conception pill. Planning a successful life is still possible and I am heading towards fulfilling my</td>
<td></td>
</tr>
</tbody>
</table>
As showed in the model above, manipulation in the second brochure involved big changes. In the bigger picture the changes of version 2 specifically addressed beliefs compliant with suggestions of Jansen and Broersma (2012) and used theory on narratives, persuasion and exemplars to enhance the effect of the beliefs addressed. Version 1 used the information of the original Khomanani brochure. The first version contained information used in the original brochure of Khomanani, with exception of the first page, which is included in both brochures to give general information on HCT. It should be noted that the original Khomanani brochure contained quite more pages. Version 1 uses the same information as used in the original Khomanani brochure, yet leaves out two of the four pages on examples of ‘How do you know you’re ready?’ and two of the four pages on examples of ‘The HIV test’. Due to the fact that version 1 contains two more pages than version 2; the numbering for the brochures is different.

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<table>
<thead>
<tr>
<th>Version 1</th>
<th>Version 2</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td>Both versions are the same</td>
<td>Cover</td>
</tr>
<tr>
<td>Page 1</td>
<td>Same page used in both brochures</td>
<td>New developed page on general information about HCT</td>
</tr>
<tr>
<td>Page 2</td>
<td>Different pages used in the brochures</td>
<td>Page on: ‘why should you test for HIV?’</td>
</tr>
<tr>
<td>Page 3</td>
<td>Page in accordance with the Khomanani brochure</td>
<td>-</td>
</tr>
</tbody>
</table>
Persuading South African students to undergo HIV Counseling and Testing through campaign brochures | Benthe Bosma

| stories of students on ‘How do you know you’re ready?’ | Page 4
Page after the original Khomanani brochure on stories of students on ‘How do you know you’re ready?’ | Page in accordance with the Khomanani brochure | - |
|---|---|---|---|
| Page 5
Page about the HIV test | Page in accordance with original Khomanani brochure | Page on ‘The HIV test’ | Content of HIV testing is more elaborate
Additional exemplar |
| Page 6
Page on ‘The HIV test procedure’ | Page in accordance with original Khomanani brochure | Page on ‘The HIV test procedure’ | Additional information on behaviour of medical staff |
| Page 7
Page on testing HIV positive | Page in accordance with original Khomanani brochure | Page on ‘Testing HIV positive’ | Facts on HIV are included
Additional exemplar
Content on testing HIV positive is more elaborate |
| Page 8
Page on testing HIV negative | Page in accordance with original Khomanani brochure | Page on testing HIV negative | Additional information added about testing negative |
| Page 9
Page on relationships of one person testing positive | Page in accordance with original Khomanani brochure | Page on relationships of one person testing positive | |
| Page 10
Page on finding clinics to get tested | Page added to give general information about possibilities where one can get tested | Different page on protecting yourself | Information on protection |

Table 6: global differences between brochure version 1&2

Cover page
The cover page of the second brochure version was the same as the basic brochure. It depicted a picture of two youngsters, a male and a female, holding hands. This picture was also used in the original Khomanani brochure: ‘Your relationship—taking it to the next level’. The Khomanani organisation focused on young people, hence the youngsters depicted in the cover of the original brochure. Although version 1 focussed more on relationships and disclosure between partners in accordance with SANAC guidelines, the picture could also be used for version 2. The brochure needed to target students, depicting them on the cover was therefore suitable for attracting the target group.
Page 1: What is HIV Counselling and Testing?
This part consisted of basic information about HCT and included an introduction to HIV Counselling and Testing. Moreover it showed facts about HIV under the header ‘HIV facts you should know’. The content was almost the same as version 1- elaborated with extra statistical information about HIV because, according to the theory of Han & Fink (2012) increasing the amount of statistics enhances persuasiveness. The second version addressed the variables of perceived susceptibility and perceived severity, showed in table 5.

Page 2: Why should you test for HIV?
The second page differed from version 1. Perceived susceptibility is a variable of the IMBP that needed to be addressed according to the research of Broersma & Jansen (2012). With regard to the SANAC guidelines, this theme does not have to be used when designing intervention material. As Hoeken et al. (2008) state, the use of exemplars can increase persuasiveness. Therefore targeting perceived susceptibility could be accomplished by using exemplars in combination with statistical information. This page started by mentioning ‘as a student’ targeting the audience. The second sentence went on ‘if you ever had unprotected sex [anal, vaginal or oral] you are at risk of having contracted HIV, therefore it is important for you to know your HIV status’. Although many students may be oblivious to the fact that they might be at risk when they have unprotected sex, this first sentence stated the opposite. Adding statistical facts targeting youngsters between the ages of 15 and 29, an age group of which students are a part, increased the likelihood of persuading students. Combining this statistical information with exemplars may enhance persuasiveness.

The first exemplar used Kelsey as a narrative and focused on the disadvantage outcomes of being diagnosed with HIV and the stigma of other people towards people living with HIV/AIDS. The sentence ‘my parents first rejected me’ showed the stigma that people may have and addressed the belief and fear of people that others will stigmatise them. The last part of the text showed that although there might be people that can discriminate those living with HIV, taking life into your own hands could prove them wrong. The story of Kelsey adhered to coping expectation of people and contradicts the SANAC guidelines of not mentioning stigma and staying positive and forward-focused. Kelsey mentioned that dealing with HIV did not rule out a healthy, successful life. Although she struggled with accepting her HIV status at first: ‘Having tested HIV positive was not easy for me’, she managed to live a normal good life.

The story of Kelsey also focused on perceived susceptibility. ‘Having unprotected sex, even though once, was stupid’. The reader should think about the risks that are involved when having unprotected sex, even though it only happened once.

The second exemplar focused on perceived susceptibility. Many South African students think that HIV/AIDS is only a problem in certain social environments and think the chances of them contracting HIV are slim. Therefore Peter, who contracted HIV, was set as a representative for most students at SU. According to Hoeken et al. (2009) his story may be translated to the whole similar group of people, in this case students of more privileged universities.
Page 4: The HIV test
This section included mostly the same information as version 1. It focused on the reader by addressing him or her directly as you. By using this format, perceived susceptibility was also addressed, hence ‘testing for HIV is necessary when you have had unprotected sex and are unaware of your own and your partners’ status’.

An exemplar was added to address stigma adding probability estimations to show that testing for HIV is more the norm than an exception, hence the sentence: ‘Talking about it with friends I noticed that a lot of people in my environment had been tested as well’. Research showed that efficacy beliefs are important to address in HIV intervention brochures, therefore the narrative was talking about his fears and stress about testing and outcomes of the test.

Page 5: The HIV test procedure
This part was used to give practical information about the procedure of HIV Testing and Counselling. It addressed confidentiality issues of staff, since this is a theme that needed to be mentioned according to the research of Broersma and Jansen (2012).

Page 6: HIV test results: Testing HIV positive
Page 6 gave basic information about testing HIV positive and about coping expectations. General information, statistical information and the use of an exemplar were combined to enhance persuasiveness. Moreover coping expectation of fear not to be able to realise dreams in the future, physical side effects and the fear of not being able to take medicines for the rest of the individual’s life were mentioned. The general text mentions these themes and refers to the story of Maya. Maya’s story showcased the experience of encountering these aspects. She mentioned her own stigmatising view on people living with HIV before she was diagnosed. Now she knows better.

Page 7: HIV test results: Testing HIV negative
This section explained what it means to be diagnosed HIV negative and targets the responsibility of the reader. Although diagnosed negative, it does not mean the reader cannot contract HIV anymore. Page 7 included information about the risks of contracting HIV and disclosure between partners and the strengths of a good relationship.
Perceived susceptibility was met with the last part of the page in the section below, ‘you should also speak to your health worker or counsellor about how to be sure you are practicing safe sex’.

Page 8: HIV test results: One of us is negative, the other one is positive – now what?
This part stayed the same as version 1. It consisted of information about how to be in a relationship where one of the partners is HIV positive and it explained how the HIV negative person could still share a life together with his or her partner.
Page 9: Protect yourself
This page gave short information about being safe practicing sex and making sex-related decisions.

Page 10: Places to help you
This section stayed exactly the same as version 1 and the original Khomanani brochure.

3.5 PRE-TEST

Pre-testing of the questionnaire was done among 10 South African students at Stellenbosch University, both male and female. They were asked to fill out the questionnaires and write down remarks with regard to the questions, instructions and problems while filling out the questionnaire. Due to comments made about the formulation of questions and the content of the items, some were deleted or rephrased.

During the process of developing the survey, feedback was taken into account to improve the questions. The knowledge questions ‘Is HIV/AIDS caused by spiritual or supernatural forces?’ and ‘can a person get rid of HIV/AIDS by sleeping with a virgin?’ were excluded. According to the respondents, these questions were experienced as stigmatising the South African populations as foolish. Another question had to be rephrased because it was too generally formulated; hence ‘people who have HIV/AIDS have nothing to feel guilty about’ was changed into ‘people who have HIV/AIDS do not have to feel guilty about this’. Furthermore an English native-speaking student checked the questionnaire, as well as the brochure.

A pre-test of both brochures was done among 5 students of the Stellenbosch University. They were asked for comments on content and format. Students checked the brochures, respectively, on grammar, comprehensibility and layout. They indicated that the brochure was easy to understand and the layout to be professional. Some corrections were made with regard to the grammar of the brochure. Especially white students indicated that the photos of students should depict students from different ethnic background to avoid stigma. The students even pointed out to be surprised by information that was given in version 2 on HIV and on HIV testing. They were especially surprised by the statistical information on HIV/AIDS.
### 3.6 EXPERIMENTAL DESIGN

The study consisted of a between-group experiment design with two conditions. The groups consisted of I- African South African students and non-African South African students who read either brochure version 1 or 2 and were afterwards subjected to a questionnaire developed to test the most important beliefs, perceptions and intention of students to go for HCT and questions about the brochure they read.

**Group I: African South African**  
Subjected to brochure version 1 – a version after an original Khomanani brochure according to SANAC message guidelines

**Group II: Non-African SA**  
Subjected to brochure version 1 – a version after an original Khomanani brochure according to SANAC message guidelines

**Group III: African South African**  
Subjected to brochure version 2 – a manipulated version of version A, with proposed message guidelines in accordance to findings of study by Broersma & Jansen (2012)

**Group IV: Non-African SA**  
Subjected to brochure version 2 – a manipulated version of version A, with proposed message guidelines in accordance to findings of study by Broersma & Jansen (2012)

The variables of the research consisted of dependent and independent variables.

**Independent variable:**  
Brochure version 1 & 2 and ethnic background (African & non-African)

**Dependent variable:**  
Intention of undergoing HIV Counselling and Testing

**Interfering variables:**  
Individual variability and environmental factors

The research focused on the content of the promotion message (what to tell), rather than the format (how to tell it). According to the table below, the message content differed for each version.

<table>
<thead>
<tr>
<th>Guidelines SANAC</th>
<th>Proposed message guidelines research</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Focus on the benefits of testing</td>
<td>- Focus on parents approve of going for HCT</td>
</tr>
<tr>
<td>- Focus on disclosure between partners</td>
<td>- Focus on possibly disadvantageous outcomes</td>
</tr>
<tr>
<td>- Message remains positive, forward-focused and hopeful</td>
<td>- Focus on fear and stress that they may expect to experience when going for HCT</td>
</tr>
<tr>
<td>- Do not delve into questions of discrimination</td>
<td>- Focus on possible stigmatising attitude towards people living with HIV/AIDS</td>
</tr>
<tr>
<td>- No stigmatisation of people living with HIV/Aids</td>
<td></td>
</tr>
<tr>
<td>- Do not delve into questions about confidentiality issues</td>
<td></td>
</tr>
</tbody>
</table>
3.7 PROCEDURE

The data were collected in the period between May and July, 2013. Students were targeted through e-mail and through personal contact. However students could only fill out the survey online through an online link that was sent to them by e-mail. Respondents targeted were unaware of two versions of the brochure being measured. Half of the non-African South Africans were given a link to the online survey with brochure version 1 and the other half received a link to the survey with brochure version 2. The same procedure was applied in the case of African South African students.

To obtain a representative sample of respondents, students from different ages, gender, cultural backgrounds and study areas were targeted. A pre-test of the questionnaire indicated the time students needed to fill out the questionnaire, an average of 20 minutes. However, during the process three e-mails were received from students who could not open the online questionnaire at home properly. They had to re-open the online survey at the university library. A first round targeting students was done by personal approach at the SU campus and in all the libraries of Stellenbosch University, but unfortunately this did not yield sufficient respondents. A second round was enabled by the division of Research and Planning that sent e-mails to all South African students at Stellenbosch University. 165 students completed the entire questionnaire. There were no surveys to exclude due of missing answers, because the online survey could only be submitted when all answers were completed. However two surveys were excluded because the respondents gave the same score on every question. Using an online tool guaranteed anonymity, since the answers submitted were automatically retrieved from ThesisTools. The online programme put the results automatically in excel. The data were entered in SPSS to analyse the results.

3.8 DATA ANALYSIS

All analyses were computed in SPSS 20.0. Data were measured by correlation testing, reliability testing and analyses of variance.
Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma
4. RESULTS

The focus of this study was twofold. It focused on comparing the effectiveness of two brochures in persuading students to go for HCT. Moreover, the purpose of the study was to get insight into what extent African South African and non-African South African students tend to go for HCT, and to find out which proximal and distal variables are most determinant for influencing HCT intention. This section presents the results of the experiment of the two manipulated brochures. There were two different research conditions, namely version 1 compared to version 2 and African students versus non-African students. First, an analysis of variance was done to measure effects of the different conditions on the proximal and distal variables. Section 4.1 shows the results on past behaviour of students and results on intention to go for HIV testing. Section 4.2 discusses possible effects of the conditions on the proximal variables. Next, section 4.3 presents the results of the underlying beliefs, outcome beliefs, normative beliefs and efficacy beliefs. Section 4.4 presents the results of possible effects of ethnicity and version on the distal variables. In section 4.5 results of the readability, attractiveness and persuasiveness of the brochure are presented. Finally, a hierarchical was done to find out what proximal and distal variables influenced HCT intention, as discussed in the last section.

4.1 PAST BEHAVIOUR AND HCT INTENTION

To measure past behaviour, the question ‘have you ever taken an HCT test’ was asked.

<table>
<thead>
<tr>
<th>Past behaviour</th>
<th>African Male</th>
<th>African Female</th>
<th>Non-African Male</th>
<th>Non-African Female</th>
<th>Total Male</th>
<th>Total Female</th>
<th>Total (Percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never taken an HIV test</td>
<td>12</td>
<td>12</td>
<td>9</td>
<td>27</td>
<td>21</td>
<td>39</td>
<td>60 (37%)</td>
</tr>
<tr>
<td>Taken an HIV-test once</td>
<td>3</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>23</td>
<td>38 (23%)</td>
</tr>
<tr>
<td>Taken an HIV-test more than once</td>
<td>16</td>
<td>8</td>
<td>14</td>
<td>27</td>
<td>30</td>
<td>35</td>
<td>65 (40%)</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>31</td>
<td>35</td>
<td>66</td>
<td>66</td>
<td>97</td>
<td>163 (100%)</td>
</tr>
</tbody>
</table>

Table 1. Past Behaviour: number of African South African males and females, non-African South African males and females, total of males, total of females, and numbers and percentages of people who have never, once or more than once taken an HIV test.

Of all 163 respondents, 63% had taken an HIV test in the past. 40% of the students indicated that they had done a test more than once and 23% said they went for HCT once.
The remaining 37% said they had never done a HIV-test. The sample showed no difference between males or females and African and non-African students with respect to their testing history.

Table 2 gives an overview of the amount of students that went to go for HCT in the past. As table 2 shows, the number of students that went for HIV indicates a majority of 103 students who have been tested before in contrast to 60 students who have never been tested. As can be deduced from table 1, there was little differences between African and non-African students. Although the number of non-African South African students who went for testing in the past seems high, the relative relationship to the amount of respondents in each target group shows no difference.

A chi square test of independence was performed to examine the relation between past behaviour and ethnic background. The relation between these variables was not significant, $\chi^2 (df= 1)= 1.55, p=.69$.

<table>
<thead>
<tr>
<th>Have you ever taken an HIV-test</th>
<th>African</th>
<th>Non-African</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>24 (39%)</td>
<td>36 (36%)</td>
</tr>
<tr>
<td>Yes</td>
<td>38 (61%)</td>
<td>65 (64%)</td>
</tr>
</tbody>
</table>

*Table 2: Past behaviour of South African students to be tested for HIV/AIDS*

To analyse the data, analyses of variance were done to find an effect of the two conditions on HCT intention. An analysis of variance was run with version and ethnic background as fixed factors (see table 4 for the relevant descriptive). The variables of the IMBP were measured. First the effect of the two conditions on HCT intention was measured. Next, the effect of version and ethnic background on the global perceptions attitude, perceived norm and self-efficacy; the underlying beliefs outcome belief, normative beliefs and efficacy beliefs and the distal variables e.g. perceived severity, perceived susceptibility, fear of behaviour of medical staff, stigma and knowledge were measured. Finally the variables measuring the brochure e.g. content and text, reality of testing HCT, persuasiveness of the text and quality of the sender were measured. First some descriptives of HCT intention are given in table 3.
Table 3. HCT Intention: number of African South African students, number of non-African South African students, males & females per that intend to go for HIV testing and percentages. (1 = I strongly disagree, 5 = I strongly agree)

<table>
<thead>
<tr>
<th>Total of students that plan to take a HIV-test in the next three months</th>
<th>Yes</th>
<th>Neutral</th>
<th>No</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (%)</td>
<td>Total (%)</td>
<td>Total (%)</td>
<td>Total (%)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>African South African</td>
<td>15 (24%)</td>
<td>21 (34%)</td>
<td>26 (42%)</td>
<td>62 (38%)</td>
<td>2,69 (1,32)</td>
</tr>
<tr>
<td>Non-African South African</td>
<td>23 (23%)</td>
<td>29 (29%)</td>
<td>49 (49%)</td>
<td>101 (62%)</td>
<td>2,51 (1,39)</td>
</tr>
<tr>
<td>Male</td>
<td>17 (25%)</td>
<td>16 (24%)</td>
<td>33 (50%)</td>
<td>66 (40%)</td>
<td>2,55 (1,40)</td>
</tr>
<tr>
<td>Female</td>
<td>21 (22%)</td>
<td>34 (35%)</td>
<td>42 (43%)</td>
<td>97 (60%)</td>
<td>2,61 (1,36)</td>
</tr>
</tbody>
</table>

Table 3 shows the results of the intention of South African students to go for HIV testing. The percentages in the columns ‘yes’, ‘neutral’ and ‘no’ report the relative amount of students in each target group. For example, 15 of the 62 (24%) African South African students indicated to undergo HCT. The question ‘I plan to take an HIV-test in the next three months’ measured this intention. The students’ intention to go for testing was relatively low (M= 2.58; SD=1.37) on a Likert-scale of 1-5. Only 23% of all respondents intended to go and 31% had a neutral opinion. Within the African South African group the intention to go for testing was relatively higher (M= 2.69; SD= 1.33) than the non-African group (M= 2.51; SD=1.40). Females indicated to be more positive to go for HCT (M=2.61; SD= 1.36) than males (M= 2.55; SD= 1.36). The mean indicates a relative more positive attitude towards testing for females due to the amount of females that indicated to have a neutral attitude, since 25% of the males indicated to go for testing within the next three months compared to 22% of the females.
Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma

### Variable | Version 1 | Version 2 | African | Non-African
--- | --- | --- | --- | ---
HCT intention | 2.33 | 2.86 | 2.69 | 2.51
  | 1.40 | 1.27 | 1.32 | 1.39

*Table 4. Respondents’ intention to go for HCT (1= I strongly disagree, 5= I strongly agree)*

Analysis of variance showed a significant effect of version on HCT intention (Fchange (1,159 = 5.09), p = .025, \(\eta^2 = .031\)). Version 2 scored significantly higher on HCT (M= 2.69, SD= 1.33) than version 1 (M= 2.33 SD= 1.41). 3% of the variance in the dependent variable HCT intention was attributed to the version of the brochure.

No significant difference was found between non-African students and African students on HCT intention (Fchange (1,159) = .044, p = .51, \(\eta^2 = .003\)). The intention to go for HCT among non-African students (M= 2.51, SD= 1.40) and African students were quite low (M= 2.69, 1.33). The interaction effect between African/ non-African and version was not significant (F (1,159)= .292, p = .59, \(\eta^2 = .002\)).

### 4.2 PROXIMAL VARIABLES

In this section results are presented of the comparison of the research conditions ethnic background (e.g. African versus non-African) and brochure versions on the proximal and distal variables included in the questionnaire. The global variables measured were respectively attitude, perceived norm and self-efficacy.

#### 4.2.1 GLOBAL PERCEPTIONS

The global perceptions attitude, perceived norm and self-efficacy were measured as dependent variables. As table 4 shows, attitude towards HCT and self-efficacy scored relatively high for all four conditions, hence attitude version 1 (M= 4.22; SD=.87) and version 2 (M= 4.30; SD= .70) and ethnic background of African students (M= 4.31; SD= .75) and non-African students (M= 4.23; SD= .82).

The students scored relatively high on efficacy on both conditions, hence version 1 (M= 4.10; SD= .90) and version 2 (M= 4.15; SD=.75) and ethnic background of African students (M= 3.90; SD=.84) and non-African students (M= 4.26; SD= .79). The opinion of others towards performing HIV-testing was important to the students for all conditions (M= 3.80; SD= .91), however lower than for the conditions in attitude and self-efficacy.
86.5% of the respondents indicated to have a positive attitude towards HIV testing. However, the standard deviation was relatively high, indicating that there was some variation among students’ attitude towards HCT (M= 4.26; SD= .79). The same accounted for self-efficacy (M= 4.12; SD= .83).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Version 1</th>
<th>Version 2</th>
<th>African</th>
<th>Non-African</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Attitude</td>
<td>4.22</td>
<td>0.87</td>
<td>4.30</td>
<td>0.70</td>
</tr>
<tr>
<td>Perceived norm</td>
<td>3.80</td>
<td>0.87</td>
<td>3.79</td>
<td>0.96</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>4.10</td>
<td>0.90</td>
<td>4.15</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Table 5: Attitude towards HCT, perceived norm of significant others on HCT and belief in being able to go for HCT (1= I strongly disagree, 5= I strongly agree)

Ethnic background showed a statistically significant difference measuring the global perceptions (Fchange (3,157)= 3.84; p = .011, $\eta^2 = .068$) of which only self-efficacy showed a significant difference. 6.8% of the variance in the dependent variables was attributed to the ethnic background of the respondent (F (1,159)= 7.49; p = .007, $\eta^2 = .045$).

Non-African South African students showed a significant higher efficacy to go for HCT (M= 4.26; SD= .79) than African South Africans (M= 3.90; SD= .84). Multivariate analysis showed that there was no significant difference between the two brochure versions (F=(3,157)= .278; p = .84, $\eta^2 = .005$). The interaction effect between African/ non-African and version was not significant (F (3,157)= .481, p = .70, $\eta^2 = .009$).
4.3 UNDERLYING BELIEFS

Next, the underlying beliefs outcome beliefs, normative beliefs and efficacy beliefs were measured. First possible effects of the different conditions on outcome beliefs are discussed.

4.2.2.1 OUTCOME BELIEFS

Table 6: Mean and standard deviations of the underlying beliefs (1= I strongly disagree, 5= I strongly agree).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Version 1</th>
<th></th>
<th>Version 2</th>
<th></th>
<th>African</th>
<th></th>
<th>Non-African</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Outcome beliefs</td>
<td>3.57</td>
<td>0.82</td>
<td>3.54</td>
<td>0.79</td>
<td>3.36</td>
<td>0.92</td>
<td>3.68</td>
<td>0.70</td>
</tr>
<tr>
<td>Normative belief regarding partner</td>
<td>3.92</td>
<td>1.05</td>
<td>4.00</td>
<td>1.01</td>
<td>3.85</td>
<td>1.08</td>
<td>4.03</td>
<td>0.97</td>
</tr>
<tr>
<td>Normative belief regarding parents</td>
<td>3.78</td>
<td>1.02</td>
<td>3.76</td>
<td>0.90</td>
<td>3.87</td>
<td>0.91</td>
<td>3.70</td>
<td>0.96</td>
</tr>
<tr>
<td>Normative belief regarding friends</td>
<td>3.69</td>
<td>1.08</td>
<td>3.85</td>
<td>0.84</td>
<td>3.71</td>
<td>0.98</td>
<td>3.80</td>
<td>0.97</td>
</tr>
<tr>
<td>Normative belief regarding family</td>
<td>3.72</td>
<td>0.98</td>
<td>3.71</td>
<td>0.84</td>
<td>3.79</td>
<td>0.83</td>
<td>3.66</td>
<td>0.96</td>
</tr>
<tr>
<td>Normative belief regarding community</td>
<td>3.38</td>
<td>1.13</td>
<td>3.50</td>
<td>1.06</td>
<td>3.40</td>
<td>1.18</td>
<td>3.46</td>
<td>1.05</td>
</tr>
<tr>
<td>Confidence to undergo HCT</td>
<td>2.06</td>
<td>0.94</td>
<td>2.52</td>
<td>1.23</td>
<td>2.49</td>
<td>1.17</td>
<td>2.15</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Measuring the outcome beliefs, ethnic background proved to be a significant determinant of students’ belief that going for HCT intention would result in certain outcomes (Fchange (1,159)= 5.99; p = .016, η² = .036). 3.6% of the variance in the dependent variable outcome belief was attributed to the ethnicity of the respondent. Non-African South African students held a significant higher belief about certain outcomes of HCT (M= 3.67; SD=.70) than African South Africans (M= 3.35; SD=.93). However, the mean scores on outcome beliefs were moderate. Results showed that version had no significant effect on the outcome beliefs (F (1,159)= .159; p = .69, η² = .001) and the interaction effect between African/ non-African and version showed no significance (F (4,156)= .885, p = .47, η² = .022).
4.2.2.2. NORMATIVE BELIEFS

The normative beliefs consisted of beliefs of parents, friends, family, community and the partner of the respondents. All South students taken together indicated that their parents (57.8%) and family’s’ (58.3%) belief with regard to going for HCT was positive. Mean scores on all normative beliefs showed a moderately high effect of the two conditions (table 6). None of the conditions proved to have a relevant effect on the underlying beliefs.

Due to a low amount of respondents with a partner (n= 66) this variable was included separately. Both the conditions version (F (6,154)= 1.20; p = .31, η² = .045) and ethnicity (F (6,154)= 1.26; p = .28, η² = .047) showed no significant effect on normative beliefs of the partner. Both conditions proved to have no interaction effect (F (6,154)= .72; p = .63, η² = .027).

Analysis of variance of the remaining four normative beliefs showed that there was no significant differences between any of the two conditions on ethnicity of being African or non-African (F(4,156)= 1.33; p = .26, η² = .033) and brochure version (F(4,156)= .73; p = .57, η² = .018). However mean scores on both conditions indicated that students’ perceived social pressure towards going for HCT were high. Especially scores on the normative belief of partners were quite high, especially for non-African students (M= 4.03; SD=.97) and version 2 (M= 4.0; SD= 1.01). However, the standard deviation for the latter was relatively high, indicating that there was some variation among students’ normative belief of the partner. There was no significant interaction effect between the two conditions (F (4,156)= .88; p = .47, η² = .022).

4.2.2.3 EFFICACY BELIEFS

Multivariate analysis showed a significant difference of the conditions on efficacy beliefs. Version had an effect on students’ belief of being able to go for HIV testing (F (1,159)= 7.09; p = .015, η² = .037). 3.7% of the variance in efficacy beliefs was explained by version. Version 2 scored relatively higher (M=2.52; SD= 1.22) than version 1 (M= 2.06; SD= .94). However both scores on efficacy beliefs were relatively low. These mean scores indicated that South African students had little control over their HCT intention.

No significant difference was found between the ethnic groups (F (1,159)= 3.16; p = .07, η² = .02) and no interaction effect could be found between the two conditions (F (1,59)= .022; p = .88, η² = .00).
4.4 DISTAL VARIABLES

The distal variables included were perceived severity, perceived susceptibility of being at risk of having contracted HIV, perceived susceptibility of being at risk of getting infected with HIV, fear of inappropriate behaviour of medical staff, stigma towards PLWHA’s and knowledge about HIV/AIDS.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Version 1 M</th>
<th>SD</th>
<th>Version 2 M</th>
<th>SD</th>
<th>African M</th>
<th>SD</th>
<th>Non-African M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived severity of HIV/AIDS</td>
<td>4,63</td>
<td>0,62</td>
<td>4,65</td>
<td>0,59</td>
<td>4,62</td>
<td>0,66</td>
<td>4,65</td>
<td>0,57</td>
</tr>
<tr>
<td>Perceived susceptibility (1) of being at risk of getting infected with HIV</td>
<td>2,32</td>
<td>1,32</td>
<td>2,19</td>
<td>1,31</td>
<td>2,47</td>
<td>1,32</td>
<td>2,13</td>
<td>1,30</td>
</tr>
<tr>
<td>Perceived susceptibility (2) of being at risk of having contracted HIV</td>
<td>1,75</td>
<td>0,94</td>
<td>2,01</td>
<td>1,22</td>
<td>2,11</td>
<td>1,10</td>
<td>1,73</td>
<td>1,06</td>
</tr>
<tr>
<td>Fear of inappropriate behaviour medical staff</td>
<td>1,88</td>
<td>1,07</td>
<td>2,12</td>
<td>1,07</td>
<td>2,11</td>
<td>1,19</td>
<td>1,92</td>
<td>0,99</td>
</tr>
<tr>
<td>Stigma towards PLWHAs regarding guilt</td>
<td>2,54</td>
<td>0,99</td>
<td>2,52</td>
<td>1,18</td>
<td>2,58</td>
<td>1,09</td>
<td>2,50</td>
<td>1,08</td>
</tr>
<tr>
<td>Knowledge about HIV/AIDS</td>
<td>9,24</td>
<td>1,03</td>
<td>9,37</td>
<td>0,81</td>
<td>9,39</td>
<td>0,78</td>
<td>9,25</td>
<td>1,01</td>
</tr>
</tbody>
</table>

Table 7. Mean and standard deviation of the distal variables with version and ethnic background as independent variables (1= I strongly disagree, 5= I strongly agree).

Mean scores of the six items showed interesting results. Scores for perceiving HIV/AIDS as a dangerous and serious disease were very high. On a scale from 1-5, the mean score for perceived severity was (M= 4.64; SD= .60). Perceived susceptibility was measured with two separate variables. Both variables indicate that students have low risk of getting infected with HIV (M= 2.26; SD= 1.3) or having contracted HIV (M= 1.88; SD= 1.09). However, standard deviation was relatively high for both items, indicating that there was some variation among students’ perception of being at risk for contracting HIV.

Fear of medical staff showed low scores as well, i.e. students did not have fear for the attitude of medical staff when going for HCT (M= 1.99; SD= 1.07). The knowledge of students was measured on a scale ranging from 1-10 (10 indicating that all questions were answered right). Students’ knowledge on HIV/AIDS was very high (M= 9.30; SD= .93).
The last distal variable taken into account was stigmatising attitude towards people living with HIV/AIDS. Students’ scored quite low on stigmatising attitude (M= 2.35; SD= 1.08).

Multivariate analysis showed no significant effects between the conditions version (F (6,154)= 1.20; p= .31; η² = .045) and ethnic background (F (6,154)= 1.26; p= .28; η² = .047) on distal variables. Moreover, an effect between the conditions could not be found (F (6,154)= .72; p= .63; η² = .027).

4.5 ATTRACTIVENESS, READABILITY AND PERSUASIVENESS OF THE BROCHURE

The last section of the questionnaire focused on questions with regard to the brochure. Students were asked to respond to statements that focused on the text and structure of the brochure, the reality of testing for HIV/AIDS, persuasiveness of the content and quality of the sender. These items were meant to measure the attitude of South African students towards the brochure.

Mean scores on all variables were quite high (presented in table 8). Questions with regard to content and structure received the highest score (M= 4.42; SD= .62), followed by variables measuring the reality of testing (M= 4.23; SD= .76), the reality of the sender of the brochure (M= 4.07; SD= .72) and persuasiveness of the brochure (M= 4.0; SD= .74). These figures indicate that, overall, students were very positive towards the brochures. Comparison of the mean scores between the two versions shows that there is little difference between versions 1 and 2. The same accounts for differences between African and non-African students.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Version 1 M</th>
<th>SD</th>
<th>Version 2 M</th>
<th>SD</th>
<th>African M</th>
<th>SD</th>
<th>Non-African M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content and structure of the text</td>
<td>4.43</td>
<td>0.64</td>
<td>4.42</td>
<td>0.60</td>
<td>4.42</td>
<td>0.67</td>
<td>4.43</td>
<td>0.58</td>
</tr>
<tr>
<td>Reality of testing for HIV</td>
<td>4.21</td>
<td>0.83</td>
<td>4.26</td>
<td>0.70</td>
<td>4.34</td>
<td>0.70</td>
<td>4.17</td>
<td>0.80</td>
</tr>
<tr>
<td>Persuasive effect of the brochure</td>
<td>3.92</td>
<td>0.72</td>
<td>4.00</td>
<td>0.76</td>
<td>4.07</td>
<td>0.82</td>
<td>3.88</td>
<td>0.68</td>
</tr>
<tr>
<td>Quality of the sender</td>
<td>4.09</td>
<td>0.81</td>
<td>4.03</td>
<td>0.60</td>
<td>4.10</td>
<td>0.70</td>
<td>4.04</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Table 8. Mean and standard deviation of the brochure items with version and ethnic background as independent variables (1= I strongly disagree, 5= I strongly agree).

An analysis of variance was done to find possible effects of the brochure version and ethnic background on the brochure variables.
Version of the brochure (F (4,156)= .69; p= .60; η² = .017) and ethnicity (F (4,157)= 1.03; p= .39; η² = .026) did not prove to have a significant effect on the students’ attitude towards the brochure. There was no interaction effect between the two conditions (F (4,156)= .95; p= .44; η² = .024).

4.6 HIERARCHICAL REGRESSION ANALYSIS

Hierarchical multiple regression was performed to research the ability of the different variables of the IMBP model to predict the level of HCT intention. As the variable past behavior was measured on an ordinal level, it could not be included in the hierarchical regression analysis. Therefore, influence of past behavior on HCT intention is discussed separately. An analysis of variance showed that past behavior had a significant effect on HCT (F (1, 162) = 5.20; p = .024) and explained variance of 3.1% (R²).

During the first hierarchical regression the normative belief from partners was excluded due to a small amount of respondents that indicated to have a partner (n= 66). In order to test the influence of the normative belief of partner on HCT intention, a separate hierarchical regression was performed. However none of the three models proved to be statistically significant in this analysis.

**Hierarchical regression without normative belief from partner**

In the first step of hierarchical multiple regression, the three proximal variables were entered: Attitude, perceived norm and self-efficacy. This first model was statistically insignificant from zero (F (3, 159) = .517; p = .671) and explained 1 % of variance (R²).

Inclusion of the underlying beliefs resulted in a significant change in the variance accounted for. Entering the underlying beliefs (outcome beliefs, normative beliefs and efficacy beliefs) at step 2, the variance in the dependent variables indicated to be 10% (F (9, 153) = 1.993; p = .044). The underlying beliefs explained an additional 10 % variance in HCT intention, which was a statistically significant increase in variance accounted for over the first model (R² Change = .095; F (6, 153) = 2.715; p = .016). In the second model two out of nine predictor variables were statistically significant, where normative belief of friends’ approval to go for HCT had scored higher (β = .255; p = .037) than the outcome beliefs of attitude (β = .193; p = .024).

Inclusion of the third set of variables, the distal variables, showed a statistical significance (F (15, 147) = 2.088; p = .013) and explained 18% of the variance to go for HCT intention. Addition of the distal variables explained an additional 7% variance accounted for which was not statistically significant (R² Change = .071; F (6, 147) = 2.102; p = .056).
|                                | Model 1 $R^2 = .010$ | Model 2 $R^2 = .105$ | Model 3 $R^2 = .176$
|--------------------------------|-----------------------|-----------------------|-----------------------
|                                | $\beta$ | Sig  | $\beta$ | Sig  | $\beta$ | Sig  |
| Global perception Attitude     | -.010  | .908 | -.070  | .449 | -.074  | .415 |
| People who are important to me think it is good to go for HCT | .105  | .222 | -.010  | .915 | .015  | .884 |
| Global perception self efficacy | -.020  | .818 | -.046  | .663 | .037  | .744 |
| Outcome beliefs of attitude    | .193   | .024 | .155   | .071 |
| Efficacy beliefs               | .164   | .077 | .155   | .110 |
| My parents think it is good to go for HCT | .127   | .381 | .134   | .349 |
| My friends think it is good to go for HCT | .255   | .037 | .253   | .037 |
| My family thinks it is good to go for HCT | -.157  | .315 | -.156  | .316 |
| In my community going for HCT is valued | .029   | .759 | .011   | .904 |
| Perceived severity             | -       | -    | -       | -    |
| Fear of medical staff          | -       | -    | -       | -    |
| Knowledge sum of all good answers | -       | -    | -       | -    |
| I am at risk of having contracted HIV | -       | -    | -       | -    |
| I am at risk of getting infected with HIV | -       | -    | -       | -    |
| Stigmatising attitude towards PLWHAs | -       | -    | -       | -    |

Table 9. Beta and significance of the proximal and distal variables.
Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma
5. CONCLUSION AND DISCUSSION

This study ultimately aimed at providing developers of health campaigns with insights, which may help develop documents to communicate on HIV Counseling and Testing (HCT). More specifically, this research focused on comparing two versions of HCT campaign brochures in persuading South African students to go for HCT. Findings of this research do not support the existing Integrative Model of Behavioral Prediction (Yzer, 2008), which focuses on changing beliefs with respect to a particular behaviour, due to the fact that the relations between the proximal and distal variables as assumed in the IMBP are not confirmed.

The global perceptions attitude, perceived norm and self-efficacy did not significantly explain intention to go for HCT. Two underlying beliefs proved to explain HCT intention. These variables were students’ belief that their friends would approve of their going for HCT and the students’ beliefs about the likelihood that the uptake of HCT would result in certain outcomes. Compliant with results of Tempelman and Vermeer (2009) attitude and subjective norms (perceived pressure of others) were predictors of people’s intention to undergo HIV testing. In accordance with findings of Jansen and Broersma (2012) and Swanepoel et al. (2008), outcome beliefs proved to be a salient determinant of HCT intention. In contrast to research of Jansen and Broersma (2012), students’ belief of their parents’ approval of their going for HCT was not significant, instead approval of friends of their going for HCT proved to be a relevant determinant of HCT intention. From the distal variables that were included, past behaviour proved to be a possible predictor of HCT intention. Students who had already done a test in the past on the one hand, were more willing to be tested in the future than students who had never done so, on the other hand. Similar results were found in research of Swanepoel et al. (2008), differences were found among students that had considered going for HIV testing or already had taken one in the past and students who had not.

According to the outcomes of this study, version of the HCT brochure proved to have a significant effect on HCT intention. Students, who read the brochure that specifically targeted the beliefs that Jansen and Broersma (2012) found to be most relevant for HCT intention in African South African students, were more likely to go for HCT than respondents that read the brochure compliant with the guidelines of the South African National AIDS Council (SANAC, 2010). As indicated in the introduction, the beliefs that Broersma and Jansen (2012) found to be most relevant for HCT intention for African South African students, are the “students’ belief that their parents would approve of their going for HCT; the fear and stress they may expect to experience when going for HCT; their self-confidence in respect of dealing with a disadvantageous outcome of the HIV test; their possible stigmatizing attitude towards PLWHAs and their perceived susceptibility to HIV/AIDS.
Another useful outcome of this study may be that the manipulated brochure, in accordance with findings deducted from research of Broersma and Jansen (2012), version 2- had a significant positive influence on the belief of students that they would not be too afraid or stressful about going for HCT. This may be explained by changes made in the second version that addressed these efficacy beliefs. However as results showed, students control on their HCT intention was relatively low.

In accordance with research of Swanepoel et al. (2008), significant differences between subgroups of students were found. There were clear differences between ethnic backgrounds on the proximal variables. Non-African South African students proved to have a stronger belief that they would be able to deal with possible disadvantageous outcomes than African South African students.

Moreover, results showed that non-African students hold a more positive perception of having control over their HCT intention (self-efficacy). These findings are interesting, because Jansen and Broersma (2012) found these beliefs to be relevant predictors of HCT in African South African students. Outcome beliefs and self-efficacy may therefore be applicable to African as well as for non-African students.

5.1 IMPLICATIONS AND RECOMMENDATIONS

One of the limitations in this study is the focus on one specific target group, hence the South African students of the Stellenbosch University (Stellenbosch, South Africa). Yzer (2008) stated that “because beliefs will differ between behaviours and populations, and because of the role of beliefs in behaviour change”, it is essential to understand a behaviour from the perspective of the target population before one attempts to change behaviour. The Stellenbosch University is one of the best Universities of South Africa and requires a certain level of intelligence. Therefore the sample was relatively specific with regard to the level of education. In future, similar research, the study should be performed at several different parts of South Africa simultaneously with a diversity of level of intelligence of students to target a more representative group of South African students.

The present study included questions with regard to students’ partner. However, due to the small amount of students that indicated to have a partner, this variable had to be included separately. However students’ belief of significant others’ approval of their going for HCT was relatively high. With inclusion of more students with a partner and a larger sample size, different results may be obtained.

Scores for several variables were quite high. Scores of students’ knowledge of HIV/AIDS and HIV counseling and testing was extremely high. Knowledge in this regard can work as a ceiling effect where measurement of the variables may have little effect.
Finally, there are limitations related to the design of the manipulated brochure. To make these messages effective, the brochure compliant with suggestions of Jansen and Broersma (2012) were optimized based on theories on narratives and exemplars. Students’ attitudes towards the brochure were very positive, however no significant difference was found between the two research conditions. Given the outcomes of the research it is hard to explain the significance of the variables and significance of conditions on proximal and distal variables. The present study was limited due to differences between brochure versions that focused on more factors with regard to content simultaneously. It might be valuable to measure brochures specifically on content or format. However, fewer differences may also result in little to no effect. In this perspective, it might be interesting to measure the effectiveness of brochures as a persuasive medium for influencing intention.

One single researcher did the implementation of theory and changes made may therefore be subjective. Assumptions were made about the impact of differences between the brochures; hence the more differences in format and content, the bigger the difference in results. However due to changes made in content as well in format, it was difficult to point out which factors determined the results that were found. Outcomes of this research showed no significant difference in attitude towards the brochure between the two versions. All students indicated to have a positive attitude towards the readability, persuasiveness and attractiveness of the brochure.

This study showed that several variables and beliefs that account for African South African students are also applicable to non-African South African students. The next step would be to determine the salient determinants of HCT intention of students with different ethnic backgrounds where all groups are represented by a large amount of students from different regions. Moreover, it is recommended to take a closer look at the IMBP. Variables in this research, such as the global perceptions and distal variables showed no significant relation.
REFERENCES


Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma


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Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma
APPENDIX I: QUESTIONNAIRE SURVEY

Research into HIV Counselling and Testing brochures in South Africa
Thank you for participating in this research conducted by Benthe Bosma, Master student at the University of Groningen, faculty of Arts (the Netherlands) and researcher at Stellenbosch University.

Purpose of the study
This research aims to contribute to the knowledge about intervention programmes of HIV Counselling and Testing in South Africa.

The questionnaire focuses on HIV/AIDS and HIV Counselling and Testing (HCT) and targets South African students. Therefore you are selected to participate in this research. HIV Counselling and Testing was formerly known as Voluntary Counselling and Testing (VCT). HIV-prevention intervention provides the client the opportunity to confidentially explore and understand his or her HIV risks and to learn his/her HIV infection status with the support of a counsellor (Avert, 2013).

Information will only be used for the benefit of this research for the University of Stellenbosch and the University of Groningen (The Netherlands).

Procedure
You will be asked to first read the brochure and afterwards answers questions. Please take your time to read the questions and answer them as honestly as possible and tick the boxes that best reflects your opinion. Please complete all questions by ticking your answer according to your desired response. There are no right or wrong answers.

The questionnaire is anonymous and your answers will be treated confidentially.

Risks and benefits
Participation in this research does not involve any risks or discomfort. You will not personally benefit from participation, however you will contribute to the knowledge about HIV/AIDS intervention programmes in South Africa.
Instruction
1. Read each question carefully and give the most honest answer
2. Follow the directions given for answering the questions
3. Do not skip questions

Section A.
In this section, general questions will be asked to gain personal information

1. Age in years
   ________________ years old

2. Ethnic group
   □ Black
   □ Coloured
   □ White
   □ Indian

3. Gender
   □ Male
   □ Female

4. Highest degree completed
   □ Undergraduate diploma
   □ Bachelor
   □ Postgraduate diploma
   □ Honours
   □ Master
   □ PHD
   □ Other

5. Field of Study (please specify e.g. Law, engineering, education etc.)
   __________________________________________________________

6. What is your mother tongue/home language?
   _________________________________________________________

7. What is your second language?
   _________________________________________________________
Section B.
Please read the statements below and indicate what you think about them by ticking the square that best reflects your opinion.

8. Have you ever taken an HIV test?
   □ Yes, once  □ Yes, more than once  □ No

Section C.

Tick the box that that best reflects your opinion

Example question: Testing for HIV is wise
I strongly disagree  □   □   □   □   □   I strongly agree
   Very unwise  Unwise  Neutral  Wise  Very wise

The boxes 1-5 indicate the levels above

If you have ticked the wrong answer, you can correct your answer by ticking a new box and draw a circle around the correct answer.

9. I plan to take an HIV-test in the next three months
I strongly disagree  □   □   □   □   □   I strongly agree

10. Going for HCT is useful
I strongly disagree  □   □   □   □   □   I strongly agree

11. It is wise to go for HCT
I strongly disagree  □   □   □   □   □   I strongly agree

12. It is important to go for HCT
I strongly disagree  □   □   □   □   □   I strongly agree

13. Should I test HIV-positive, I expect to manage to consistently take anti-retroviral medicine for the rest of my life
I strongly disagree  □   □   □   □   □   I strongly agree
14. Should I test HIV-positive, I expect that I will be able to cope with the physical side effects of antiretroviral medicine
I strongly disagree  □  □  □  □  □  □  I strongly agree

15. Should I test HIV positive, I expect I will still be able to realize my dreams
I strongly disagree  □  □  □  □  □  □  I strongly agree

16. Should I test HIV-positive, I expect I can learn to accept that
I strongly disagree  □  □  □  □  □  □  I strongly agree

17. Should I test HIV-positive, I expect to be able to take care of myself
I strongly disagree  □  □  □  □  □  □  I strongly agree

18. Should I test HIV-positive, I expect to be able to plan a good future for myself
I strongly disagree  □  □  □  □  □  □  I strongly agree

19. Should I test HIV-positive, I fear that I will be stigmatized and discriminated against
I strongly disagree  □  □  □  □  □  □  I strongly agree

20. Should I test HIV-positive, I fear that loved ones will reject me
I strongly disagree  □  □  □  □  □  □  I strongly agree

Section D.
Please read the statements below and indicate what you think about them by ticking the square that best reflects your opinion.

21. People who are important to me think it is good to go for HCT
I strongly disagree  □  □  □  □  □  □  I strongly agree

22. My partner thinks it is good to go for HCT
I strongly disagree  □  □  □  □  □  □  I strongly agree
□ I don’t have a partner

23. My parents think it is good to go for HCT
I strongly disagree  □  □  □  □  □  □  I strongly agree
24. My friends think it is good to go for HCT
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

25. My family thinks it is good to go for HCT
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

26. In my community going for HCT is valued
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

Section E.
Please read the statements below and indicate what you think about them by ticking the square that best reflects your opinion.

27. I think I am physically able to go for HCT
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

28. I think I am psychologically able to go for HCT
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

29. I think I can easily go for HCT without pressure of my environment
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

30. Going for HCT would be too stressful for me
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

31. I would be too afraid to go for HCT
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

Section F.
32. I am at risk of getting infected with HIV
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐

33. I am at risk of having contracted HIV
I strongly disagree ☐ ☐ ☐ ☐ ☐ I strongly agree ☐ ☐ ☐ ☐ ☐
34. It is dangerous to get infected with HIV
I strongly disagree □ □ □ □ □ I strongly agree

35. HIV/AIDS is a very serious disease
I strongly disagree □ □ □ □ □ I strongly agree

36. Should I go for HCT, I fear that the medical staff will reveal my test-results to other people
I strongly disagree □ □ □ □ □ I strongly agree

37. If I test HIV-positive, I am afraid that the medical staff will have negative attitudes towards me when I go for medical help
I strongly disagree □ □ □ □ □ I strongly agree

38. People who have HIV/AIDS do not have to feel guilty about this
I strongly disagree □ □ □ □ □ I strongly agree

39. People who have HIV/AIDS are like everybody else
I strongly disagree □ □ □ □ □ I strongly agree

Section G: General questions about HIV/AIDS
Please note down the answers to the best of your knowledge

40. Is HIV/AIDS spread by kissing?
□ Yes □ No □ I don’t know

41. Can a person get HIV/AIDS by sharing kitchens and bathrooms with someone with HIV/AIDS?
□ Yes □ No □ I don’t know

42. Must a person have different partners to get HIV/AIDS infected?
□ Yes □ No □ I don’t know

43. Can you get HIV/AIDS by touching someone with HIV/AIDS?
□ Yes □ No □ I don’t know

44. Does washing after sex help to protect you against HIV/AIDS?
□ Yes □ No □ I don’t know

45. Can a pregnant woman give HIV/AIDS to her baby?
□ Yes □ No □ I don’t know

46. Is HIV the virus that causes HIV/AIDS?
□ Yes □ No □ I don’t know
47. Is there a cure for HIV/AIDS?
□ Yes □ No □ I don’t know

48. Can you see if someone has HIV/AIDS by looking at him or her?
□ Yes □ No □ I don’t know

49. Can medicine prolong the life of someone with HIV/AIDS?
□ Yes □ No □ I don’t know

Section H: Questions about the brochure
Please tick the boxes that best reflect your opinion.

50. The text is easy to understand
I strongly disagree □ □ □ □ □ I strongly agree

51. The information in the text is clear
I strongly disagree □ □ □ □ □ I strongly agree

52. The text of the brochure is to the point
I strongly disagree □ □ □ □ □ I strongly agree

53. The structure of the text is logical
I strongly disagree □ □ □ □ □ I strongly agree

54. The text is well organized
I strongly disagree □ □ □ □ □ I strongly agree

55. This brochure gives me useful tips for living with HIV
I strongly disagree □ □ □ □ □ I strongly agree

56. This brochure shows the reality of testing
I strongly disagree □ □ □ □ □ I strongly agree

57. This brochure shows the reality of living with HIV
I strongly disagree □ □ □ □ □ I strongly agree

58. This brochure prepares me mentally for taking an HIV-test
I strongly disagree □ □ □ □ □ I strongly agree
59. This brochure convinces me to go for HCT
I strongly disagree □ □ □ □ □ I strongly agree

60. This brochure convinces me that I can also be at risk for contracting HIV
I strongly disagree □ □ □ □ □ I strongly agree

61. This brochure convinces me that I am capable of going for HCT & dealing with a possible disadvantageous outcome
I strongly disagree □ □ □ □ □ I strongly agree

62. This brochure shows me how to deal with being diagnosed HIV positive
I strongly disagree □ □ □ □ □ I strongly agree

63. This brochure shows me that people living with HIV are like everyone else
I strongly disagree □ □ □ □ □ I strongly agree

Finally, what do you think of the following statements
I find the sender of this brochure
64. Unintelligent □ □ □ □ □ Intelligent
65. Unprofessional □ □ □ □ □ Professional
66. Stupid □ □ □ □ □ Bright
67. Untrustworthy □ □ □ □ □ Trustworthy
68. Dishonest □ □ □ □ □ Honest
69. Not reliable □ □ □ □ □ Reliable

Thank you for participating in this research by filling out this questionnaire
APPENDIX II: BROCHURE VERSION I
Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma
Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma
What is HIV Counselling and Testing?

HIV Counselling and Testing was formerly known as Voluntary Counselling and Testing (VCT). HIV-prevention intervention provides the client the opportunity to confidentially explore and understand his or her HIV risks and to learn his or her HIV infection status with the support of a counsellor.

Why should you test for HIV?

- 5.6 million people are living with HIV/AIDS in South Africa.
- This means 1 out of 10 people around you are living with HIV/AIDS.
- You and your partner could be infected with HIV without knowing it. If you ever had sex, you could be infected with HIV.
- It takes many years for the signs of HIV to show up.
- The only way to know if you have HIV is to have an HIV test.

Have you and your partner talked about getting tested? Are you ready for the next level?
You’re young, you’re in love, and you and your sweetheart are totally committed. You trust one another and you’re good together. Just one thing— you’d like to forget about condoms. **Check out Anna’s and Harry’s story...**

*Harry and Anna decided to test for HIV together, because it meant they could take their relationship to the next level. They had the power to plan for a healthy future.*

*Harry and Anna knew that they were committed to one another. They knew that safe sex was the only way to go, and that you can’t stop using condoms without being tested. But to stop, both partners must know their HIV status, and they must trust one another absolutely.*

*Keep wearing condoms if there is any chance of you or your partner being unfaithful, even if you’ve both tested negative.*

*Men and women can make informed decisions together about having sex, using condoms and getting pregnant together.*
How do you know if you are ready?

Living a healthy life is important to Harry and Anna. They knew they had to get tested before having unprotected sex with each other.

Here are some tips:

• **Choose your partner wisely.** Get to know them, how they behave to others, whether they do what they say, what they believe in.

  *Lebo tells a story in how she thought she loved Thabo: “He bought me presents all the time – every time he came to see me, he had a knew thing for me- a necklace, a watch, even once a cellphone. I really thought I loved him – but after a while I realized that with his presents, he was just ‘buying’ me."

• **In the beginning of a relationship, attraction and pleasure are often mistaken for love.** Spend time together doing other things before you make the decision to have sex. Don’t confuse sex with love, because it could be very dangerous.

• **Know your needs and talk about them.** Sometimes men and women are scared to say what they want. Speak up. Your partner is not a mind reader and must know your needs.
How do you know if you are ready?

• See yourself as a team. You may be two different people, but can work as a team bringing your different abilities and strengths together.

Zanele and Sipho have been together for three years. Sipho says the reason for this is that they have always supported one another.

“When my mother was sick and I had to stay home from Tech to look after her, Zanele made sure that she got lecture noted from my classmates so that I didn’t fall too far behind with my studies. And when Zanele had to get a job to pay for her fees one year, I made her lunch in the mornings so she didn’t have to spend extra money buying lunch.”

• Learn to negotiate. Modern relationships don’t have to rely on cultural roles. It is your life and your body so you should take good care of your own health. Agreeing on things together can only make your relationship stronger.

These are just some of the things that let you know if your relationship is solid. Partners who trust one another can talk together, even about getting tested for HIV.
The HIV test

Taking an HIV test is an important step towards planning a healthy future. You know testing for HIV is important when you have had unprotected sex and are unaware of your own and your partners’ HIV status.

You know all about HIV and AIDS. You know AIDS is a disease that affects millions of South Africans. You know HIV is a virus that lives in your body for many years and eventually causes AIDS.

You know that when a person with AIDS does not get treatment with ARVs, he or she will die.

So you have decided you need to know your status – you want to test for HIV. You’ve taken the first step to show that you care about stopping the spread of HIV and about living your life to the fullest. What happens next?
The HIV test

What happens when you test?

- You will get counselling before and after the test. Someone who is trained in HIV and AIDS counselling will talk to you about taking the test. They will also talk to you about how you might feel about your results and what to do about it.

- Once you have decided to take the test, they will need to take some of your blood to test for antibodies to HIV. If your clinic can do rapid testing, this will be a quick and relatively painless finger prick test and after 15 minutes you will receive your result. If an ELISA test is used, blood will be taken from your vein and sent to a laboratory for testing. You will receive the results on a later date.

- After the test you can get post-counselling. Regardless if you test positive or negative, the counsellor can discuss the test results and its consequences with you.

- Couples can get tested and counselled together. If you want to be counselled together, talk to the counsellor about it.
HIV test results

You’ve tested positive – now what?

If you tested HIV positive, you are infected with HIV. Strong feelings are normal. It could take time to accept your HIV status. When you feel ready, talk to someone you trust who can give you support. You can also support one another from within the strength of a loving relationship.

If you test positive, you can still look after yourself and enjoy a healthy life for longer. You can live with hope and share your life with family and friends. The introduction of ART in south Africa means you can live a longer, healthier life. So do not panic, you can live. HIV is a manageable medical condition. If you take your ARVs daily, go for regular medical check-ups and go to the clinic if you get sick, you can live a long life.

Some people believe that when testing HIV negative or positive, one cannot get infected with HIV again. This is NOT true. Always use a condom when you have sex to prevent yourself from getting re-infected. If you get a new HIV-infection, or re-infect one another, this will make your immune system weaker.
HIV test results

You’ve tested negative – now what?

If you’ve tested HIV negative, you are not infected with HIV. But even if you test negative, you can still get HIV in the future.

- You will need to continue to have protected sex if you have any doubt about the faithfulness or HIV status of your partner.
- The virus may not show up in the first test. Wait for three months and go for another test.
- HIV can be passed on more easily if you have a sexually transmitted infection (STI). Get treated straightaway if the clinic says you have one.
- Stick to your choice to be faithful to one another. Make sure that you can trust each other completely.
- Continue to learn more about HIV and AIDS.

Support those in your community who are HIV positive.
One of us is negative, the other one is positive – now what?

It is quite common for one person in a relationship to test HIV positive and the other HIV negative. Remember that your partner could have become HIV positive many years before this relationship. You need to think about what will happen if that is the case.

- It is possible to carry on with your relationship in this situation.
- The person who is HIV negative is not immune to HIV. He or she can still become infected if they do not have safe sex.
- It is not true that you will always get infected if one of you is positive. If you practice safe sex, it is still possible for the HIV-negative partner to stay negative, as long as you are careful.

You should also speak to your health worker or counselor about how to be sure you are practicing safe sex.
Where do you get tested?

- From the age of 16, you can be tested for free at Government HIV clinics without your parents’ consent.
- When you are studying, you can be tested for free at most campus clinics.
- You can also pay to get tested at most private doctors, clinics, hospitals and laboratories.

To find your closest clinic where you can be tested, call the AIDS helpline on 0800 012 322
Places to help you

AIDS Helpline
Tel: 0800 012 322
Gives telephone counselling and information about HIV and AIDS 24 hours a day, 7 days a week. Also gives advice about where you can go for confidential HIV testing if you want to.

FAMSA (Family and Marriage Society of South Africa)
Tel: (011) 975-7106
Gives family and individual counselling. Phone to find the nearest centre.

National Department of Health
Tel: (012) 312-0122
For information on basic health care services and contact details for your provincial or local health department.

Red Ribbon Resource Centre
Tel: (011) 880-0405
To order and find out about books and pamphlets about HIV, AIDS, sexually transmitted infections, good eating and lots more.

Contact your local clinic for more advice on HIV or testing sites for HIV.
APPENDIX III: BROCHURE VERSION II
Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma
What is HIV Counselling and Testing?

HIV Counselling and Testing was formerly known as Voluntary Counselling and Testing (VCT). HIV-prevention intervention provides the client the opportunity to confidentially explore and understand his or her HIV risks and to learn his or her HIV infection status with the support of a counsellor.

HIV facts you should know

- 5.6 million people are living with HIV/AIDS in South Africa.
- This means 1 out of 10 people around you are infected with HIV/AIDS.
- The annual number of new infections of HIV in SA entails 400,000 people.
- You and your partner could be infected with HIV without knowing it. If you ever had unprotected sex, you could be infected with HIV.
- The annual number of AIDS death rates in South Africa entails 300,000 people.
- If you don’t get treated for HIV with ARV you will get AIDS and die.
- The only way to know if you have HIV is to have an HIV test, because it takes many years for the signs of HIV to show up.

Have you and your partner talked about getting tested? Are you ready for the next level?
Why should you test for HIV?

As a student at a higher education institution you are in a high-risk age group for HIV. If you have ever had unprotected sex (anal, vaginal or oral) you are at risk of having contracted HIV, therefore it is important for you to know your HIV status.

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"Having tested HIV-positive was not easy for me. My parents first rejected me, because they thought I ruined my chance at a good future. Having unprotected sex, even though once, was stupid. However after testing positive, I have taken responsibility into my own hands. I talked about it with friends and other HIV positives. I have taken life chances more seriously. Now I have a good job, a lot of friends and a loving boyfriend who supports me. Even my parents came around after seeing the changes and progress I have made. I am happy I can live a healthy life due to medicine". Kelsey
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FACTS
Youngsters between 15-29 are the highest risk group of having HIV.

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"My girlfriend Nita and I wanted to have sex together and both thought we could not be infected with any disease. Being a South African student, there are not a lot of people in my social environment that are infected with HIV.

After a couple of years with Nita she found out she was infected with HIV. After taking the test, I was tested HIV positive as well. I called the girls I had slept with and it appeared that my last ex-girlfriend was also HIV-positive. She had taken a test after we broke up. It appeared one of us had contracted HIV before. Now Nita, my ex and I all have HIV. We all did the same thing: thinking that we could not be at risk for getting HIV". Peter
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The HIV test

You know all about HIV and AIDS. You know AIDS is a disease that affects millions of South Africans. You know HIV is a virus that lives in your body for many years and ultimately causes AIDS. When a person with AIDS does not get treatment with ARVs, he or she will die.

Taking an HIV test is an important step towards planning a healthy future. Testing for HIV is necessary when you have had unprotected sex and are unaware of your own and your partners’ HIV status. The test will tell you whether you are HIV positive or negative.

So you have decided you need to know your status – you want to test for HIV. You’ve taken the first step to show that you care about stopping the spread of HIV and living your live to the fullest. What happens next?

When I heard of the chances of contracting HIV according to statistics, I first denied the fact that I could be at risk to have HIV. However, I did have unprotected sex a couple of times. Talking about it with friends I noticed that a lot of people in my social environment had been tested as well. I was very afraid of the outcome of the test and got very stressed. After testing I found out that I was HIV positive. I thought my world collapsed. Although it is a struggle in the beginning to accept having HIV, in the end I am glad I took the test. Although I have to take medicine every day for the rest of my life and there are some physical side effects of the medicine, at least I can live a long, healthy life without having to die early of AIDS.
The HIV test procedure

- **You will get counselling before and after the test.** Someone who is trained in HIV and AIDS counselling will talk to you about taking the test. They will also talk to you about how you might feel about your results and what to do about it.

- **Once you have decided to take the test, they will need to take some of your blood to test for antibodies to HIV.** If your clinic can do rapid testing, this will be a quick and relatively painless finger prick test and after 15 minutes you will receive your result. If an ELISA test is used, blood will be taken from your vein and sent to a laboratory for testing. You will receive the results on a later date.

- **After the test you can get post-counselling.** Regardless if you test positive or negative, the counsellor can discuss the test results and its consequences with you.

- **Couples can get tested and counselled together.** If you want to be counselled together, talk to the counsellor about it.

Remember that no one can share your results with anyone else when you test. Counsellors are obligated to keep your information confidential.
Testing HIV positive

If you tested HIV positive, you are infected with HIV. Strong feelings are normal. You may feel concerned about living a successful life, your physical condition and being able to take care of yourself. It can take time to accept your HIV status. However taking charge of the situation lies in your own hands. Many others like Maya have proven to succeed and to cope with being HIV positive.

The introduction of ART in South Africa means you can live a longer, healthier life. So do not panic, you can live. HIV is a manageable medical condition. If you take your ARVs daily, go for regular medical check-ups and go to the clinic if you get sick, you can live a long life.

Before I became HIV positive, I had a poor opinion about people living with HIV. Being diagnosed with HIV was therefore very difficult. I thought others would discriminate me and that life with HIV would not be bearable. When dealing with the disease I surprisingly found a lot of support. I found out my boyfriend was not worth my love, he only thought of himself and now I have found a wonderful loving partner. Although you have to get used to taking medicine everyday, it is like taking the anti-conception pill. Planning a successful life is still possible and I am heading towards fulfilling my dreams.
Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma

Testing HIV negative

If you’ve tested HIV negative, you are NOT infected with HIV. But even if you test negative, you can still get HIV in the future.

- You will need to continue to have protected sex if you have any doubt about the faithfulness or HIV status of your partner.
- The virus may not show up in the first test. Wait for three months and go for another test.
- HIV can be passed on more easily if you have a sexually transmitted infection (STI). Get treated straightaway if the testing clinic says you have one.
- Stick to your choice to be faithful to one another. Make sure that you can trust one another completely.
- Continue to learn more about HIV and AIDS.

Support those in your community who are HIV positive.

Some people believe that when testing HIV negative or positive, you cannot get infected with HIV again. This is NOT true. Always use a condom when you have sex to prevent yourself from getting re-infected. If you get a new HIV-infection, or re-infect one another, this will make your immune system weaker.
One of us is negative, the other one is positive – what now?

It is quite common for one person in a relationship to test HIV positive and the other HIV negative. Remember that your partner could have become HIV positive many years before this relationship. You need to think about what will happen if that is the case.

- It is possible to carry on with your relationship in this situation.
- The person who is HIV negative is not immune to HIV. He or she can still become infected if they do not have safe sex.
- It is not true that you will always get infected if one of you is positive. If you practice safe sex, it is still possible for the HIV-negative partner to stay negative, as long as you are careful.

You should also speak to your health worker or counselor about how to be sure you are practicing safe sex.
Protect yourself

Keep wearing condoms if there is any chance of you or your partner being unfaithful, even if you've both tested negative.

Men and women can make informed decisions together about having sex, using condoms and getting pregnant together.

To find your closest clinic where you can be tested, call the AIDS helpline on 0800 012 322
Persuading South African students to go for HIV Counseling and testing through campaign brochures | Benthe Bosma

**Places to help you**

**AIDS Helpline**
Tel: 0800 012 322
Gives telephone counselling and information about HIV and AIDS 24 hours a day, 7 days a week. Also gives advice about where you can go for confidential HIV testing if you want to.

**National Department of Health**
Tel: (012) 312-0122
For information on basic health care services and contact details for your provincial or local health department.

**FAMSA (Family and Marriage Society of South Africa)**
Tel: (011) 975-7106
Gives family and individual counselling. Phone to find the nearest centre.

**Red Ribbon Resource Centre**
Tel: (011) 880-0405
To order and find out about books and pamphlets about HIV, AIDS, sexually transmitted infections, good eating and lots more.

Contact your local clinic for more advice on HIV or testing sites for HIV.