

HIV-related stigma amongst service staff in Grahamstown: A comparison of Hi-Tec security guards and Rhodes catering in the Eastern Cape SA

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Abstract

Despite the acknowledged reality that HIV-related stigma is a major barrier to effective HIV prevention and treatment, and perhaps because it is complex in nature, few local empirical scales have been developed to measure stigma and to be able evaluate the impact of anti-stigma interventions. Whilst the development of two recent South African HIV-related stigma scales can be celebrated as a major breakthrough, the reliability and validity of these scales across contexts remains largely unknown.

This research project employs these two local, and competing, HIV-related personal stigma scales - the first developed by Kalichman et al. (2005) and the second developed by Visser, Kershaw, Makin and Forsyth (2008)-to compare the psychometric properties of the scales and to obtain a measure of HIV-related stigma with a sample of 246 service staff employed at either Rhodes University Catering Division or the Hi-Tec Security company, both organisations located in Grahamstown, a small town in the Eastern Cape, South Africa. Both organisations are major employers of semi-skilled workers in this local context.

The results suggest that the Visser et al. scale (2008) reports slightly better psychometric properties than the Kalichman et al. (2005) scale for this sample. Furthermore, the security guards appear to be more stigmatising than the caterers, and it is suggested that this might be a consequence of the combined influences of normative occupational roles and workplace context. Results also show that

participants who practices safe sex, know someone with HIV and/or who have been tested for HIV show lower levels of HIV-related stigma. Finally, personal stigma scores are generally lower than attributed stigma scores, which might offer a useful point of intervention.

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And above all to the Almighty Lord.

Dedication

I would like to dedicate this thesis to my family; my mother Esther Charumbira, Christopher, Munyaradzi, Tendai, Richard, Rungano and Elizabeth Mazorodze

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LIST OF ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ARV	Antiretroviral
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
ILO	International Labour Organisation
NGO	Non-Governmental Organisation
PLWA	People Living With HIV/AIDS
SABCOHA	South African Business Coalition on HIV/AIDS
UNAIDS	United Nations Programme on HIV/AIDS

CHAPTER ONE: INTRODUCTION

“AIDS is a war against humanity. We need to break the silence, banish the stigma and discrimination, and ensure total inclusiveness within the struggle against AIDS. If we discard the people living with HIV/AIDS, we can no longer call ourselves human.”

Nelson Mandela.

1.1 Chapter preview

This chapter provides an introduction to the study, starting with a brief overview of HIV and AIDS and stigma before describing the research aims and the rationale for the study. The chapter ends by outlining the structure of the whole thesis.

1.2 HIV/AIDS

The HIV/AIDS epidemic has left no part of the world untouched and has gradually entered our consciousness as an incomprehensible calamity. The epicentre of the pandemic has found its home in the Sub Saharan Africa where, in 2007, South Africa had a staggering 5.7 million people who were infected with HIV (UNAIDS, 2008). Such shocking statistics provides insurmountable evidence that the goal of eliminating HIV is still far from being achieved, certainly in South Africa. Citing the challenge of HIV/AIDS in South Africa, Dickinson and Versteeg(2004) blamed ‘two usual suspects’ to the slow response to HIV: the government’s failure to take an integrated approach to counter the pandemic and failure of managers to gauge the risk that HIV poses to their companies.

1.3 HIV/AIDS and stigma

Stigma has been associated with HIV/AIDS since the eruption of the pandemic in the early 1980s. Previous studies show that HIV was first identified amongst already stigmatised groups such as gay men and injecting drug users in western countries (Rohleder, Swartz, Kalichman & Simbayi, 2009; Herek & Capitano, 1998; Herek, 1999; Devine, Plant & Harrison, 1999), and the lingering association of HIV with such marginalised groups results in the double stigmatisation of people with HIV (Parker & Aggleton, 2003). In African societies where AIDS is in most cases spread through heterosexual sex, people with HIV are often viewed as promiscuous, sinners and responsible for their illness (Devine, Plant & Harrison, 1999). Indeed, the multiple layers to HIV stigma make it a complex topic of study.

The many layers of stigma include the fact that HIV is sexually transmitted (and, according to many, therefore avoidable) (Herek, 2002), is associated with death (even though antiretroviral medicines have greatly improved the outlook for people with HIV) (Nicolay, 2005), is infectious (though not nearly as infectious as many people once feared) (Nicolay, 2005), is associated with already marginalised groups (such as gay men, injecting drug users, sex workers and impoverished African men and women) (Herek, 2002), and that people with HIV require costly treatment and care (Natrass, 2004).

South Africa is a country that has seen a large number of incidents of HIV stigma and discrimination compared to most other countries (Skinner & Mfecane, 2004),

and also remains one of the countries with the highest prevalence of HIV in the world (UNAIDS, 2008). The murder of Gugu Dlamini in 1998 after she disclosed her HIV positive status and the refusal of SA Airways to employ Hoffman, a cabin attendant, on the basis of his HIV positive status are just two of the many examples of extreme manifestations of stigma in South Africa that received prominent attention in the media. There are of course, no doubt, many other examples that are less well known. However, HIV stigma does not need to result in discrimination to be harmful (Deacon, 2006): The fear of stigma can cause people to avoid knowing or disclosing their status and the negative judgments associated with stigma can be internalised with consequences for people's mental health and psychological wellbeing (Simbayi, 2008).

Despite various campaigns, interventions and research in South Africa, stigma is still seen as a serious obstacle to the fight against HIV/AIDS (Skinner & Mfecane, 2004). Due to the stigma that surrounds HIV, people often fear getting tested, fear seeking treatment, and even fear taking care of their beloved ones infected with HIV. These fears are often triggered by the misconceptions that surround the transmission of HIV.

It is however unfortunate that in the process of trying to avoid contact with HIV, people with HIV are often victims of ostracism and rejection (Herek, 1999). In such circumstances, HIV education and awareness programme are a necessity. The following section presents the motivation for this study, providing a rationale as to why it is important to research HIV-related stigma, and why there is a need for tried and tested local scales to measure stigma in local contexts.

1.4 Motivation for the study

Despite efforts to combat HIV across all sectors of the economy, there is insurmountable evidence from previous research that shows that stigma is undoubtedly one of the major obstacles in the fight against HIV/AIDS (Skinner & Mfecane, 2004; Kalichman et al., 2005; Maughan-Brown, 2004; Ogdane & Nyblade, 2005). Therefore, it is reasonable to expect the reduction of stigma to be associated with a decrease in HIV prevalence, as people are more likely to be tested, seek treatment and more willing to engage with various HIV and health campaigns.

The key point here is that success in the fight against HIV-related stigma might reduce a major obstacle to prevention, HIV testing, treatment and care - and greater success in the campaign against HIV would be expected to follow. In light of this, research that advances our understanding of HIV-related stigma is imperative.

However, researching a unique concept like stigma is not without major challenges. Acknowledging the difficulties in researching HIV-related stigma, Ogdane and Nyblade (2005) cite the difficulties in defining stigma, its complex multidimensional nature and difficulties in measuring it as some of the challenges researchers are facing. Although defining stigma has been and still remains a point of contention among researchers, much credit have been given to Goffman (1963, p.3), who defines stigma as “an attribute that is deeply discrediting” and results in the reduction of a person or groups “from a whole and usual person to a tainted, discounted one”. So while HIV and AIDS stigma is recognised as a significant issue in maintaining the AIDS pandemic, few empirical studies have been done to develop specific local

instruments to measure the concept in South African contexts. Unfortunately, most instruments designed to measure HIV-related stigma were developed for western populations (Deacon, Uys, & Mohlahlane, 2009) and only recently have researchers started to realise the need to develop stigma instruments that are tailor-made for Africa and for South Africa in particular.

Lorentzen and Morris (2003, as cited by Deacon et al., 2005), cited the lack of scientific research on stigma in Sub-Saharan Africa as one of the major challenges hampering progress in measuring and understanding stigma. There have, of course, been many surveys to measure people's knowledge, attitudes, practices and behaviours to do with HIV and AIDS (KAP studies), and while many of the items used in these surveys are relevant to HIV-related stigma, the surveys were not developed specifically to measure stigma and tend to be ambiguous (Ogden and Nyblade, 2005) and were often specifically designed for western contexts (Rohleder & Simbayi, 2009).

Given that HIV-related stigma is context specific (Herek, 2002), and that it varies according culture (McCrae et al., 2007), it is reasonable to expect stigma experienced in the western countries to differ with that experienced in African countries and with that experienced in South Africa in particular. It therefore follows that the use of scales developed for the west with South African populations is undoubtedly problematic as the scales might fail to capture the dynamic nature of stigma. However, fortunately, in South Africa some notable contributions to the development of reliable and valid local scales measuring HIV-related stigma are beginning to emerge.

1.4.1 Measurement of HIV stigma in the South African context

Kalichman et al. (2005), Visser et al.(2008) and Maughan-Brown (2004) are some of the few researchers that have made important contributions in the development of locally-validated HIV stigma scales. Kalichman et al. (2005) developed a nine item scale measuring personal stigma. Similarly, Visser et al. (2008)¹ developed a twelve item measuring personal stigma, and have adapted this to also measure internal stigma and attributed stigma. In efforts to come up with a measure of stigma in the community, Maughan-Brown (2004) developed a 26 item scale. This scale was not incorporated in this study since it does not include the personal stigma component which is central to the aims of the research at hand.

Whilst the development of HIV-related stigma scales can be celebrated as a major breakthrough towards the quantitative measurement of HIV-related stigma in South Africa, the reliability and validity of these scales across contexts remains a matter of concern. Currently, literature that demonstrates the reliability and validity of these scales across varied local contexts is lacking. This study therefore provides an opportunity to assess and compare the reliability and validity of the two personal stigma scales (Kalichman scale and Visser scale) in a slightly different context to the ones in which the scales were developed.

¹From here onwards the two scales will be referred to the Kalichman and Visser scales respectively. This is for the purpose of readability and not to minimise the contributions of the various researchers who were involved in the development of the scales.

1.5 Brief overview of the methodological approach

Thus, this study employs a quantitative research method to obtain a measure of HIV-related stigma amongst service staff at two large local Grahamstown organisations (Hi-Tec Security and Rhodes University Catering Division) and evaluate and compare the psychometric performance of the two local South African personal HIV stigma scales.

In HIV-related stigma research, as pointed by UNAIDS (2006), the quantitative research method is important as it allows:

1. The evaluation of anti-stigma interventions;
2. Comparison of HIV-related stigma levels across contexts;
3. Assessment of whether services such as the provision of anti-retroviral drugs reduces stigma;
4. The assessment of whether a program is effective in reducing stigma.

It is therefore hoped that, given the highlighted benefits of measuring stigma, this study will provide a stepping stone in assessing the points of weakness and strengths of anti-stigma interventions as implemented for the samples under study.

A comparison of the two personal stigma scales will be very interesting. Both scales are recently designed for the local South African contexts and can, therefore, be regarded as competing. Furthermore, the Kalichman scale is slightly shorter than the Visser scale (9 items versus 12 items), but the Visser scale is not available in isiXhosa or Afrikaans but only available in English (as well as Sepedi, Setswana and isiZulu, but none of these languages is commonly spoken in Grahamstown), while the Kalichman scale is available in three language versions that are commonly spoken in the region, these being isiXhosa, English and Afrikaans. So this comparison is an opportunity to determine whether the benefits of having more items, which is often associated with improved psychometric properties, are offset against the disadvantage that many of the participants will be completing the scale in a language other than their mother tongue.

Though, importantly, both scales were developed in South African contexts and all the participants are expected to be reasonably proficient in English, the cultural relativists might still argue that the language in which a scale is developed and offered is an extremely important factor in its validity, while those who lean towards a universalist position might suggest that these claims are overstated (Edwards and Young, in press). This study will test these claims by a direct comparison of both personal stigma scales within the same samples.

1.6 An outline of the structure of the thesis

This thesis comprises six chapters including the present one. Chapter Two situates the study within the context of the relevant literature and so is a review of previous

local and international research. Chapter Three describes the research methodology pertaining to the goals and objectives of the study. The chapter covers sampling techniques, participants, data collection, data analysis, as well as validity and reliability of the study. The findings of the study are presented in Chapter Four and discussed in Chapter Five. Finally Chapter Six offers a conclusion, including a short discussion of the limitations of the study and recommendations for future research.

CHAPTER TWO: REVIEW OF THE LITERATURE

2.1 Chapter preview

This chapter provides a broad review of available literature surrounding the nature of HIV and AIDS-related stigma². Included in this chapter is a discussion of the various efforts to measure HIV/AIDS-related stigma in the South African contexts and, in doing so, a number of locally developed HIV/AIDS-related stigma scales will be described, especially the two that are the focus of this study.

As will also be discussed in this chapter, research has indicated that there is a well-established relationship between HIV/AIDS-related stigma and certain demographic variables (Valdiserri, 2002). Furthermore, this chapter also aims to unpack the social challenges that HIV/AIDS-related stigma poses to people living with HIV/AIDS, both in the workplace and within society.

The scale and impact of HIV and AIDS-related stigma, particularly in a South African context, has raised fundamental questions as to whether researchers, government, and other stakeholders are doing enough to counter its deleterious effects. Although it is often said, 'a problem known is a problem half solved', this does not appear to be the case with HIV-related stigma. Some of the challenges of defining stigma and implementing anti-stigma interventions will also be discussed. It is the challenge of defining HIV stigma where the chapter begins.

²In this thesis the terms HIV and AIDS-related stigma, HIV/AIDS-related stigma and HIV-related stigma are used interchangeably.

2.2 Defining HIV/AIDS-related stigma

An accurate definition of stigma, according to Deacon, Stephney and Prosalendis (2005), is an essential step in developing measures of HIV/AIDS-related stigma as well as in the development of anti-stigma interventions. Additionally, one cannot easily separate the definitions from the causes of HIV/AIDS-related stigma, so a discussion of the known causes of stigma follows this section.

Yet HIV-related stigma is a concept that has recently experienced something of a crisis of definition, possibly because of its complex and dynamic nature (Deacon, 2006). The definition is therefore not fixed, but is in the process of construction. Defining HIV-related stigma has been a challenge for researchers ever since the start of the epidemic in the early 1980's.

Many sources have suggested that the definition of stigma is two faceted: to some it has been viewed as an individual attribute (e.g. Herek, 2002), and to others it is viewed solely as a social process (eg. Joffe, 1999; Parker & Aggleton, 2003). Whilst for Herek (2002) stigma is an individual attribute with negative social connotations, for Joffe (1999) stigma is a social practice emanating from existing social power relations that are a result of complex processes of othering, and of the resultant blaming, projection and displacement strategies. In defining stigma, Herek (2002) is greatly influenced by the work of Goffman (1963, p.3), who, as mentioned earlier, defines stigma as “an attribute that is deeply discrediting” and results in the reduction of a person or groups “from a whole and usual person to a tainted, discounted one.”

However, the tendency to view stigma as the result of either entirely individual or entirely social in nature has been challenged by researchers such as Deacon (2006), who offers instead a definition that attempts to bring the polarities of the individual and the social together into a comprehensive account of stigma. Further, by acknowledging the complexity of the concept, Deacon et al. (2005) warn researchers against conceptual inflation whereby the definition of stigma becomes too elastic, resulting in difficulties in developing specific anti-stigma interventions. Thus, according to Deacon (2006, p. 421), stigma is a process whereby:

1. Illness is preventable or controllable;
2. 'Immoral' behaviours causing the illness are identified;
3. These behaviours are associated with 'carriers' of the illness in other groups, drawing on existing social constructions of the 'other';
4. Certain people are thus blamed for their own infection; and
5. The projection of status loss to 'others', which may (or may not) result in disadvantage to them.

Moreover, Deacon (2006) argues that stigma and discrimination are separate and different concepts, even though they are closely related and often occur at the same time. As supported by Link and Phelan (2001), stigma results in negative attitudes towards people with HIV/AIDS whereas discrimination involves some form of action,

which maybe verbal or physical, and which is harmful to people with HIV/AIDS. Acts of discrimination can be degrading, even traumatic (Adewuya, et al., 2009). In fact, research evidence suggests that the experience of discrimination and isolation as a result of HIV status predicts mental disorder (Freeman, Nkomo, Kafaar & Kelly, 2007).

However, stigma does not necessarily need to result in actual tangible discrimination to be harmful to people living with HIV/AIDS: internalised or attributed stigma might cause a person with HIV/AIDS to delay testing and treatment (Mfecane & Skinner, 2004), often with catastrophic, life-threatening results. The internalised self-judgments associated with stigma might be implicated in the various negative mental health consequences that often occur with HIV infection (Young, 2011).

2.3 Causes of HIV-related stigma

This section focuses on the various causes of HIV-related stigma as this assists us to evaluate the definitions and better understand the typologies of HIV-related stigma. Given the complexity and dynamic nature of stigma (Odgane & Nyblade, 2005), an understanding of some of the causes of stigma clarifies, to some extent, what it is that needs to be measured when developing measures of HIV-related stigma.

2.3.1 HIV/AIDS-related stigma and already stigmatised groups

Research has shown that in many cases, HIV/AIDS-related stigma is largely associated with other stigmas (Parker & Aggleton, 2002; Skinner & Mfecane, 2004). The association of HIV/AIDS with already stigmatised or marginalised groups such as sex workers, homosexual men, injecting drug users, and people living in poverty, particularly women, increases stigmatisation of those living with HIV/AIDS (Herek, 2002). People who are members of already marginalised groups are, according to Goffman (1963), likely to suffer more from stigmatisation than others.

For example, Devine et al. (1999) have noted that homosexual men and injecting drug users are often identified as vectors of HIV infection and stigmatised regardless of whether they are infected or not, presumably to justify further isolation of these already stigmatised groups, thereby exacerbating existing deeply rooted prejudices.

In countries like South Africa where the heterosexual transmission of HIV/AIDS is dominant (Parker & Aggleton, 2002), women are the main targets of stigmatisation and thus women who contract HIV are often seen as having done so as a result of promiscuous behaviour. Because of the patriarchal nature of many African societies (Parker & Aggleton, 2002), men are often viewed as superior to women and are often justified in having multiple sexual partners, yet women are expected to remain monogamous and are accorded much of the blame for the transmission of HIV. From that point of departure, promiscuous behaviour is often perceived as 'non-normative' or 'pathological' behaviour in women (Attawel, Pulerwitz & Brown, 2002). Indeed, in many societies, women are also expected to be the custodians of the societal values (Ogdane & Nyblade, 2005), and are subsequently labelled as social deviants when

they are found to be HIV positive. Women who allegedly participate in promiscuous sexual behaviour are, in many cases, seen as vectors of HIV infection and a threat to their sexual partners (Attawel et al., 2002). Yet it is interesting to note that while women are more stigmatised as compared to men (Maughan-Brown, 2004; Mfecane, 2004), they are responsible for less attribution of stigma to others than are men (Valdiserri, 2002).

The relationship between HIV risk and poverty is both complex and bidirectional (Shisana, Zungu & Pezi, 2009): While poverty increases vulnerability (for example, women are often the worst hit by poverty, and many engage in transactional sex to survive (Vass, 2002)), HIV infection and HIV-related stigma can have severe economic effects on individuals and families, particularly when the economically active are no longer able or allowed to work. The association between HIV and the poor mean that both are further stigmatised, and HIV-related stigma therefore serves to reproduce and legitimise social inequalities (Vass, 2002).

Lastly, the already stigmatised will undoubtedly incur further stigmatisation and discrimination as they are perceived to be consuming limited and valuable resources in the form of extensive health costs and social grants (Maughan-Brown, 2006). This resource-based stigma will be further described below.

2.3.2 HIV-related stigma and fear

Much research has suggested that fear of infection is the major reason why people display stigmatising attitudes towards PLWA (Herek, 2002). Stigma, according to

Joffe (1999), is a mechanism whereby out groups, who are often perceived as more vulnerable to HIV/AIDS, are blamed in order to create a false sense of safety. People with HIV are subject to blame for being infected so others are able to psychologically distance themselves from the risk of infection (and from those who are infected). According to Herek (1999), HIV-related stigma fear is at least partly the result of people's erroneous beliefs about HIV and AIDS. In particular, due to the misconceptions surrounding the transmission of the disease, PLWA suffer from rejection and isolation by their friends and relatives who fear contracting the disease (Herek, 1999).

The fact that AIDS is associated with death also exacerbates the fear of people with HIV. This follows the common perception that HIV infection inevitably results in an early and painful death. Ogdane and Nyblade (2005) blame fear-based HIV/AIDS campaigns, which are sometimes still used by health workers to instil fear about the dangers of contracting HIV/AIDS, to encourage people to practice safe sex, for the continued strong association between HIV infection and death. These include, for example, posters showing human skulls and coffins that are used to frighten people into compliance with the HIV awareness messages, and it could be argued that these campaigns have possibly been more successful in promoting stigma than they have in reducing HIV risk behaviours.

Thus it is no surprise that research has shown that there is a strong correlation between poor knowledge of HIV/AIDS and HIV-related stigma (Kalichman et al., 2005; Mangan-Brown, 2004). This suggests that education is a necessary component of anti-stigma interventions. But accurate information about the

transmission of HIV on its own is clearly not enough, as stigma occurs even amongst healthcare workers (Cole & Slocumb, 1999). Perhaps the reason that information alone is not enough to eradicate stigma is that misplaced fear is just one aspect that drives stigma.

2.3.3 HIV-related stigma and sex

A further factor that contributes to the stigmatisation of HIV is that the illness is usually, certainly in sub-Saharan Africa, transmitted sexually. Accordingly, HIV/AIDS-related stigma also stems from certain religious beliefs, norms, values, and attitudes towards sex (Parker & Birdsall, 2005). HIV, then, carries that stigma that is associated with other sexually-transmitted illnesses, and because unsafe sex is regarded as avoidable, which of course fails to consider all the ways in which sex takes place in coercive contexts, people who are HIV positive are blamed for their own infections. As noted above, homosexual sex that results in HIV infection carries an additional layer of stigma (Devine et al., 1999).

Religious organisations that prohibit sex outside of marriage and promote the belief that those who have sex outside of marriage are unholy and immoral contribute to HIV-related stigma by condemning those who contract HIV sexually (Parker & Birdsall, 2005). Therefore, an HIV/AIDS positive status is often viewed as the result of lack of conformity to societal norms and values, which results in attribution of blame to those who are HIV positive (Niehaus, 2006, as quoted by Visser and Forsyth (2009)).

The role of societal beliefs in influencing stigma therefore goes some way in explaining the variation of stigma across cultures. Devine et al. (1999) argue that HIV-related stigma is socially constructed and, thus, varies from one social context to another. This, of course, poses serious challenges to researchers who seek to develop measures of HIV-related stigma that can be used across these social contexts.

2.4 HIV-related stigma in South Africa

Disease stigma is an old concept that is not unique to HIV/AIDS, but is a common collective reaction to diseases associated with death, and it is in this context that the exploration of HIV-related stigma has now developed into a separate and important area of research in South Africa (Deacon et al., 2009). Yet according to Deacon et al. (2009), HIV-related stigma research is in its infancy compared to the research in some of the other psychosocial aspects of HIV/AIDS, despite the high incidence of stigma in Africa (Skinner & Mfecane, 2004).

Furthermore, despite key contributions by researchers in the area of HIV/AIDS stigma as well as the various anti-stigma interventions and HIV/AIDS campaigns, stigma remains a major barrier to the fight against HIV/AIDS in South Africa, particularly in terms of effective treatment, prevention, HIV testing and care (Kalichman et al., 2005; Visser & Forsyth, 2009). The challenges are great as stigma and discrimination have a shameful history in South Africa, and both took a particularly terrible form in the apartheid system (Skinner & Mfecane, 2004).

Undoubtedly one of the most violent expressions of HIV/AIDS-related stigma was the brutal killing of Gugu Dlamini in December 1998 in KwaZulu-Natal for announcing that she was HIV positive on Zulu radio (Skinner & Mfecane, 2004). Tragically, it took her brutal murder to shock many international and local researchers into action, provoking an increased emphasis on HIV-related stigma research in South Africa.

The workplace has not been immune to the repercussions of HIV-related stigma (Herek, 1999). The legal case of Hoffman versus South African Airways (SAA) (Ngwena, 2001), is another prominent South African example of HIV-related stigma and discrimination that sparked a great deal of interest and debate about the legal rights of HIV-positive employees. After Hoffman had declared his HIV-positive status, SAA refused to employ him. Fortunately the court ruled that employees should not be discriminated against because of their HIV/AIDS status (Ngwena, 2001), which is also an example of how legislation is an essential component in the fight against stigma and discrimination; though not a sufficient component as it is likely that there are many who, unlike Hoffman, did not have the resources or support to mount legal challenges against their exclusions or dismissals.

Yet even with these prominent cases of HIV-related stigma that have spurred some research, researchers in general have been slow to respond and certainly there are only a few locally-developed scales that measure HIV-related stigma. This is possibly because of the common view that stigma is multidimensional, difficult to define and therefore difficult to measure quantitatively (Ogdane & Nyblade, 2005). According to Deacon et al. (2009), previous researchers have put more emphasis on

understanding the behaviour that increases HIV/AIDS risk instead of investigating stigma in greater depth.

While acknowledging the high prevalence of HIV-related stigma in South Africa (Mfecane & Skinner, 2004), studies also show that HIV-related stigma is common in other countries. In India, for example, it has been reported that people with HIV/AIDS have become 'untouchables' who are often shunned by others, while in Tanzania, HIV/AIDS is often viewed as a disease caused by the supernatural works of witchcraft (Herek, 1999). This shows that South Africa is not unique and that there is much that can be learned by sharing research and interventions across countries, particularly developing countries where resources are scarce.

2.5 Dimensions of HIV-related stigma

The complexity of HIV-related stigma has resulted in researchers describing various dimensions of the concept, in order to capture the multiple forms of stigmatisation. However, Deacon et al. (2009) have cautioned researchers against treating these stigma typologies as separate entities, since they are simply different manifestations of the same concept and occur in relation to each other.

2.5.1 Symbolic stigma

Symbolic stigma is, according to Maughan-Brown (2004), to do with the attribution of blame and shame towards people who have contracted the disease through 'immoral' behaviours like promiscuous sexual activities. Given the negative socially-

constructed meanings towards sexual activities which are viewed in some quarters as sinful (Parker & Birdsall, 2005), people with HIV/AIDS are therefore often viewed as sinners who must be isolated and shunned (Ogdane & Nyblabe, 2005). The attribution of blame (and, by implication, risk) to others is done to distance oneself from the perceived risk of contracting the disease so as to create a (false) sense of safety in a frightening world (Devine et al., 1999).

2.5.2 Instrumental stigma

While symbolic stigma involves the attribution of blame to those believed to have acquired HIV through 'immoral' behaviours, instrumental stigma is the fear of infection from casual transmission (Deacon et al. 2009). According to Herek and Capitanio (1998), this involves the tendency of individuals to avoid people with HIV/AIDS as a way of protecting themselves from contracting the disease. The result, according to Tajfel and Turner (1986), is the heightening of differences between the in-group ('us', or uninfected, non-'deviant' people) and the out-group (who are marked with spoiled identities according to Goffman (1963) as 'them' or infected 'deviant' people). This form of stigma results from the belief held by many people that social interaction with PLWA threatens one's physical wellbeing. Given the misconceptions that the general society has towards both the pandemic and PLWA, instrumental stigma poses a great challenge to the social life of individuals affected by HIV.

2.5.3 Resource-based stigma

According to Maughan-Brown (2004), resource-based stigma (a South African contribution to the stigma typologies (Deacon et al. 2009)) has to do with denial of allocation of resources to people with HIV/AIDS. This idea stems from the widely held misconceptions that people with HIV/AIDS are responsible for contracting the virus and are unlikely to make their full social contributions to society, and therefore should not be allowed to make significant demands on state resources.

2.5.4 Personal stigma

Visser et al. (2008) define personal stigma as one's personal beliefs and perceptions towards people with HIV/AIDS. Personal stigma can be expressed or enacted (external stigma) towards those who are HIV positive. In light of this definition, the beliefs of individuals towards PLWA can be different from the societal view. For example, one might consider marrying someone infected with HIV/AIDS whilst the broader society might view this as unacceptable. On the other hand, society might also have its collective views that are more inclusive and accepting which might not sitwell with certain individuals.

2.5.5 Attributed stigma

This refers to the perceived stigmatising attitudes that are attributed to the community in general (Visser et al., 2008). Such generalised perceptions negatively influence the perceptions of individuals towards people with HIV/AIDS (Visser et al.,

2008). Perhaps most significantly, the collective societal views towards the PLWA can cause members of the society to fear disclosing their HIV/AIDS status, to refuse to undergo HIV/AIDS testing and to delay seeking treatment (Kalichman et al., 2005). In fact, this attributed stigma, which may be worse than actual stigma, is likely to have a profound effect on the behaviour of those who are HIV positive.

2.5.6 Internalised stigma

In contrast to enacted, expressed, or external stigma, internalised stigma (or felt stigma) is the stigma that HIV-positive people direct towards themselves (Herek, 2002). According to Aggleton and Parker (2002), internalised stigma often results in depression, withdrawal, and feelings of worthlessness. While some resist stigma, many, maybe most, conform to stigma, which, according to Deacon et al. (2005), can be very difficult to cope with, and psychologically damaging as well as being associated with mental health problems such as depression and substance abuse (Simbayi, Kalichman, Strebel, Cloete, Henda & Mqeketo, 2007) and psychological trauma (Young, 2011). In a study of women infected with HIV, social stigma was the strongest predictor of PTSD severity (Katz & Nevid, 2005). Ogden and Nyblade (2005) note that self-stigma or internalized stigma is the most awful consequence of enacted or external stigma for people living with HIV/AIDS. The resulting shame associated with AIDS is, according to UNAIDS (2005), the greatest barrier to prevention, testing, treatment and care.

2.5.7 Courtesy stigma

Deacon et al. (2009) also identified a further type of stigma in the literature called courtesy stigma. Courtesy stigma refers to the stigma that is directed towards family members or friends of people suffering from HIV. This type of stigma shows that HIV-related stigma does not only affect people who are infected with HIV but also those who care or live with people with HIV.

2.6 Measurement of HIV-related stigma

Given all of this, it is easy to see why the measurement of a complex and multidimensional concept like stigma is a difficult task for researchers, yet an accurate measure of stigma is necessary in order to counteract its adverse effects (Ogdane & Nyblade, 2005). As efforts to address HIV-related stigma increase, a set of standardised, tested and validated stigma indicators have become a necessity (USAID, 2006). According to USAID, measures that can both describe an existing environment, and evaluate and compare interventions are also lacking in the African context.

Measurement of HIV-related stigma is, according USAID (2006), important for the following specific reasons:

1. To enable the evaluation of anti-stigma interventions;
2. To enable researchers to identify effective models of HIV-related stigma;

3. To enable researchers to compare the levels of stigma across contexts.

Because HIV-related stigma varies across time and place (Visser et al., 2008), it follows that instruments used to measure it must capture people's perceptions of HIV/AIDS in the local context at the same time as taking into account the dynamic nature of stigma. An understanding of the context within which stigma is displayed will thus go a long way towards devising tailor-made anti-stigma interventions.

However, in contrast, recent research by van Brakel (2006) showed that the typologies of HIV-related stigma, its origins, its manifestations, and its implications are reasonably consistent across settings, despite what some researchers have claimed. This, therefore, supports the use of standardised scales to measure stigma across particular settings. Similarly, Ogden and Nyblade (2005) have noted that the causes of stigma and its forms are similar across contexts. This bodes well for the efforts to develop measures that can be used across contexts, even if only safely across local South African contexts.

There is of course debate on the value of the quantitative measurement of stigma; the position adopted in this research, however, is that while some contextual information is undoubtedly lost when using quantitative measures, locally-developed, valid and reliable measures in general allow for data to be collected from large samples and to be easily analysed so that trends can be carefully tracked across time and place (Robson, 1993). This would be as true for stigma as it is for other complex psychological concepts.

So, while HIV-related stigma is widely believed to be the major obstacle to the fight against the rise of HIV/AIDS infections (Kalichman et al., 2005), surprisingly few empirical studies have been done to develop specific local instruments to measure the concept in the South African context, despite the argued benefits of doing so. As mentioned, there have, of course, been many surveys to measure people's knowledge, attitudes, practices and behaviours relating to HIV/AIDS (KAP studies), and while many of the items used in these surveys are relevant to HIV-related stigma, the surveys were not developed specifically to measure stigma and, therefore, tend to be ambiguous in this regard (Ogden & Nyblade, 2005).

The majority of researchers in HIV-related stigma simply transferred scales developed in the West to African samples, which may be problematic in terms of reliability and validity of the results (Deacon et al., 2009). Whilst the recent development of HIV-related stigma scales is one of the major contributions by South African researchers to the quantitative measurement of HIV-related stigma in South Africa, even these few scales have yet to be employed in multiple local contexts to fully evaluate their reliability and validity. It therefore follows that if these local scales are tried and tested in different contexts and proves to be valid and reliable, researchers will be in a better position to select appropriate scales with confidence.

Two very promising local personal stigma scales have been developed, which are the focus of this research project. Kalichman et al. (2005) have developed a brief and psychometrically sound HIV-related personal stigma scale that has been used in

a number of South African contexts. The nine-item scale measured perceptions of towards those living with HIV/AIDS. The scale is available in three languages versions, namely English, isiXhosa, and Afrikaans. Five independent samples participated in this research; altogether, these samples add up to 2306 participants. The scale reportedly indicated acceptable internal consistency and validity (Kalichman et al., 2005).

Similarly, Visser et al. (2008) recently developed another local HIV-related stigma scale. Their scale was developed for both South African and broader African contexts. The full scale consists of three parallel stigma scales aimed at measuring personal stigma, internalised stigma and attributed stigma. Their initial study involved two samples: one of 317 HIV-infected pregnant women and another of 1077 participants from in two urban townships in Tshwane, in the Gauteng province. All three of the scales reported acceptable internal consistency and validity.

Also notable is the work of Maugan-Brown (2004) who developed a psychometrically-sound, 26-item scale. This scale measures HIV stigma in the community and not personalised stigma, so was not included in this study, which aims to compare measures of personal stigma. Along with the Kalichman scale and the Visser scales, the Maugan-Brown scale presents a major breakthrough in the development of local measures of stigma in South Africa. Also of value are the indicators of HIV-related stigma developed by the Siyam'kela Project (2003). Although this study did not validate a new instrument, they provided a platform for the development of indicators of HIV-related stigma in the South African context.

Efforts by all these researchers represent significant progress in the development of quantitative measure of stigma in the South African context.

While acknowledging the notable contributions of local researchers in developing measures of stigma, it is important to note that other researchers have worked and are still working tirelessly to develop measures of stigma that are tailor made for other parts of Africa. In 2006, a research team sponsored by USAID developed some indicators of stigma specifically for the African continent. The team measured HIV-stigma quantitatively using four key dimensions:

1. Fear of casual transmission and refusal of contact with PLWA;
2. Societal values and norms resulting in the judgement of PLWA;
3. Enacted stigma;
4. Disclosure of HIV/AIDS status.

The University of KwaZulu-Natal in conjunction with the University of California also developed two instruments tailored for the African continent. The first instrument was measuring internalised stigma and the second measured HIV-related stigma among nurses (Uys et al., 2009).

2.7 The impact and consequences of HIV-related stigma

As already noted on a number of occasions, HIV-related stigma remains a major barrier to the fight against HIV/AIDS (Skinner & Mfecane, 2004). People with HIV often suffer from HIV/AIDS-related stigma in different ways and in different contexts (Visser et al., 2008). In many cases PLWA face the following problems: breakdown of marriages or relationships, rejection, denial of privileges, denial of rights, expulsion from school, isolation, and even violence (Chibaya-Mbuya, 2000).

HIV-related stigma affects differently at the family and the individual level. At an individual level, stigma has the potential to degrade ones' identity and negatively impacts on the person's capacity to cope with the realities of HIV/AIDS (Skinner & Mfecane, 2004). At the family and the community levels, HIV/AIDS brings shame and causes people to limit their involvement in more positive responses (Aggleton & Parker, 2002). Stigma-related fear is, perhaps, the most formidable barrier to disclosure of an HIV positive status (Skinner & Mfecane, 2004). Due to the fear of being stigmatised, most people infected by HIV are not easily able to discuss their status with their relatives and friends who are potential sources of help. Even worse, the fear of the consequences of HIV/AIDS-related stigma often causes people to be reluctant to seek an HIV test or treatment (Herek, 2002). Accessing treatment will often result in involuntary disclosure (particularly in small communities like Grahamstown), and so stigma results in treatment delays that can often have catastrophic consequences.

The forfeiture of social support through failing to disclose can have serious psychological consequences: Freeman, Nkomo, Kafaar and Kelly (2007) report that HIV-positive people who are members of a support group are less likely to have a

psychological disorder than those who have not been part of a support group. As already noted, the internalisation of stigma is associated with poor mental health, including depression (Simbayi, Kalichman, Strebel, Cloete, Henda & Mqeketo, 2007) and possibly trauma (Young, 2011). This might explain the high mental health burden carried by those who are HIV positive, of which depression, substance abuse and trauma are all very prominent (Freeman, Nkomo, Kafaar & Kelly, 2008).

It is important to note that stigma does not only affect people who suffer from HIV/AIDS but also their families. Family members of PLWA are sometimes indirectly stigmatised in different aspects of life. Research shows that in some instances, children of PLWA bear the worst impact of stigma, including being rejected from schools, and are isolated and ridiculed and otherwise victimised by their peers (Ogdane & Nyblade, 2005).

Research has also revealed rather unfortunate findings that, in some instances, health workers who are supposed to be caretakers of people with HIV/AIDS display some stigmatising tendencies towards such patients. This is common especially with those patients who contract HIV through ways deemed to be a result of lack of social responsibility, such as intravenous drug users and the failure to practice safe sexual intercourse (Cole & Slocumb, 1999). This surely increases the risk that people subjected to this sort of stigma will disengage from the health services, undermining the very efforts of the public health service.

It is also necessary to note that while HIV-related stigma is a barrier to treatment, disclosure, prevention, and testing, Deacon et al. (2005) argue that HIV-related

stigma is not the only barrier. The danger of attributing all treatment and care failures to stigma is that the definition of stigma becomes anything that prevents disclosure, treatment and care, and is, therefore, far too elastic to be meaningful. Parker and Birdsall (2005), too, warn against regarding HIV-related stigma as an ultimate barrier to testing, prevention, disclosure, and treatment.

2.8 Variation of HIV-related stigma according to demographic variables

HIV-related stigma is known to be correlated with specific social, psychological, and demographic variables (Herek, 1999; Valdiserri, 2002). In support of this assertion, Shisana and Simbayi (2002) argue that stigma has deep roots in the domains of gender, race, ethnicity, educational level, sexuality, and culture.

2.8.1 HIV-related stigma and education

Previous research has shown that there is correlation between educational levels and HIV-related stigma. According to a study by the South African Human Sciences Research Council (HSRC), participants with higher levels of education displayed lower levels of stigma (Shisana & Simbayi, 2002). Similarly, Herek (1999) found that older participants with lower levels of education displayed higher levels of stigma as compared to the young with higher levels of education.

However, while Maughan-Brown (2004) report that stigma is highly correlated with educational level, Vass (2002) found no such relationship, suggesting that the relationship between these variables is more complex than previous findings

suggest. Supposedly, education would counteract some of the myths surrounding the transmission of HIV that are implicated in maintaining stigma, but the mixed findings suggest that further research is warranted.

2.8.2 HIV-related stigma and gender

According to Derlega, Greene and Petronio (2003), attitudes towards and experiences of HIV/AIDS can vary between men and women. Women are generally more likely to be compassionate toward those with HIV/AIDS (Valdiserri, 2002). One possible explanation for this finding is to do with (sexist) gender norms. The societal expectation is that women should play a more significant role in maintaining the home and taking care of family members who become sick, which might explain their generally more compassionate treatment of those who are HIV positive.

Yet women also carry the brunt of stigma. As mentioned earlier, women are generally expected to be the custodians of societal values and norms (Parker & Birdsall, 2005), and because the modes of HIV/AIDS infection are assumed to contradict these societal values, HIV/AIDS-positive women are often blamed for the HIV/AIDS pandemic (Herek, 2002; UNAIDS, 2005). Ogden and Nyblabe (2005) noted that societal expectations are that women should be faithful and therefore obliged to remain with one partner. This view is a reflection of the patriarchal nature of many African societies that emphasizes male dominance and female purity (Parker & Aggleton, 2003).

Incidentally, women are more vulnerable to HIV infection than men (Vass, 2002). This increased vulnerability to HIV in comparison with men is a factor of female anatomy as well as socio-economic factors that see women dominating in low-paid, unskilled, and informal jobs, which exposes them to the harsh effects of poverty that include sometimes the need to engage in transactional sex in order to survive. Furthermore, women in these subordinate roles are not easily able to refuse sex with their economically dominant male partners or demand that they use condoms. The disempowerment of women and dominance of patriarchal men is a major challenge in reducing the transmission of HIV (Jewkes, 2009).

2.8.3 HIV-related stigma and religion

Previous research has shown that there is relationship between HIV-related stigma and religion. Research by Maughan-Brown (2006) suggests that being a member of a religious group is associated with greater likelihood of attitudes to HIV/AIDS that are stigmatising. However, it remains unknown and rather debatable to assume that membership of person to a religious grouping is a measure of religiosity. Nevertheless, the apparent relationship between membership of a religious organisation and stigma points to the important role that religious organisations can and sometimes do play in combating stigma.

2.8.4 HIV-related stigma and race

South Africa is characterised by deep racial divisions and inequalities (Butler, 2004), and so the burden of HIV is not evenly distributed (Rehle et al., 2007). As previously

mentioned, HIV-related stigma often reproduces and reinforces existing prejudices (Herek, 2002), so black HIV-positive South Africans are more likely to be stigmatised than the more advantaged South African racial groups (Dickinson, 2005). In support of this claim, Maughan-Brown (2006) reports that coloured and white participants scored higher in measures of symbolic stigma and instrumental stigma than black participants. This therefore reveals that HIV-related stigma remains a manifestation of racial divisions that characterises South African society.

2.8.5 HIV-related stigma and contact with people who are HIV positive

In a country like South Africa with a high prevalence of HIV (UNAIDS, 2008) and with a high prevalence of HIV-related stigma (Skinner & Mfecane, 2004), it is reasonable to assume that the majority of South Africans know or have been involved with people with HIV. It is important therefore to ascertain what impact this will have on people attitudes to people with HIV. According to Goffman (1963), higher levels of involvement with people with a disability results in greater acceptance of those people, so the same might be true in the case of HIV.

In support of this, a study by Shisana and Simbayi (2002) found that participants who scored higher in personal involvement with PLWA also reported lower levels of stigma towards PLWA. However, the growing prevalence of HIV does not necessarily result in decreased stigma; in fact, Brown et al. (2003) point out that the ubiquity of stigma and its persistence even in areas where HIV/AIDS prevalence is high makes it an extraordinarily important yet difficult area of research. Perhaps people are able to avoid any personal involvement with others who are HIV positive

even when the prevalence is high. This might be because HIV infection is largely invisible because the disease progresses relatively slowly and the fear of stigma prevents disclosure, so even when the prevalence is high, visibility remains low and people's prejudices remain unchallenged.

2.9 HIV/AIDS and HIV-related stigma in the workplace

Given that South Africa carries such a massive burden of HIV (UNAIDS, 2008), it is reasonable to expect South African companies, like other groups and organisations, suffer serious consequences of the pandemic, including stigma and discrimination. The South African workforce is mainly composed of the young and economically active (Odendaal & Root, 2001), which is also the age group that carries the highest prevalence of HIV (UNAIDS, 2005). Once again the prevalence is not evenly distributed, but, according to Dickinson (2003) and SABCOHA (2005), is concentrated in lower skill bands. A challenge for companies is to maintain a healthy and productive workforce. Unfortunately HIV and HIV-related stigma both threaten this. Not surprisingly, then, that the International Labour Organisation (2001) stresses that HIV/AIDS must also be seen as a workplace issue. However, Dickinson and Versteeg (2004) warn against the common, though simplistic 'one size fit all' approach when dealing with HIV in the workplace.

Despite the deleterious effects of HIV, available literature shows that the majority of companies are only beginning to deal with the pandemic (SABCOHA, 2005). Dickinson and Versteeg (2004) cited the inability of companies to gauge the magnitude of threat that is posed by HIV/AIDS as the major factor in explaining the

slow response by many companies to counter the effects of the pandemic. A study by the South African Business Coalition on HIV/AIDS (SABCOHA, 2005) shows that in 2003 alone, about 40% of South African companies confirmed that HIV/AIDS has a negative impact on their overall productivity.

Whiteside and Sunter (2000) highlighted the economic and social effects of having employees who are HIV positive in a company as follows: low productivity; low morale; increased medical aid and hospital costs; and increased rate of accidents due to fatigue, isolation, rejection, and absenteeism. Research by Morris (2000), as cited by Natrass (2004), in a KwaZulu-Natal Sugar mill also confirmed that HIV/AIDS positive employees affected the company through absenteeism and low productivity. However, this is not to suggest that economic consequences are the only reason that companies would or should rally against HIV; many business people and others have acknowledged that they have a social responsibility to ensure the wellbeing of their employees. Acknowledging the need to fight against HIV, some companies started employee ARV treatment programmes long before the government started its national rollout (SABCOHA, 2005). Yet stigma continues to undermine these efforts and threatens the wellbeing of those who are HIV positive.

2.9.1 HIV-related stigma in the workplace

With the national rollout of antiretroviral medications, employees with HIV are living longer and, according to Hunt, Jaques, Niles and Wierzalis (2003), while accepting that their lives have changed due to their diagnosis, should be entitled to continue working. Yet despite the much-improved outlook for people with HIV, there is much

evidence to suggest that they continue to be stigmatised in the workplace (Hunt, et al., 2003). According to SABCOHA (2005), more than 75% of the mining and financial services companies surveyed indicated that stigma and discrimination has undermined the effectiveness of their HIV/AIDS programmes. Other research suggests that HIV-positive employees often suffer from various forms of HIV-related stigma from both their superiors and co-workers (Kauffman & Launder, 2004). Moreover, HIV-related stigma also has the power to weaken strong informal commercial networks. This suggests that a great deal needs to be done to counter HIV-related stigma in the workplace.

In an interesting study by Horizons (2002), Eskom employees expressed more concern about the stigmatising attitudes of their co-workers than about discrimination from their employers. The study also revealed that there is still an element of fear among employees when it comes to disclosing their status, as they fear that by disclosing their status they could lose their jobs, or suffer a salary reduction and/or reduced working conditions. However in some cases, when people encounter stigma in the workplace, they either seek new job opportunities or quit the job altogether (Hunt et al., 2003). By resigning, PLWA will be putting company's production levels at risk of declining, and thus may compromise their own productivity and job-security.

Ogdane and Nyblade (2005) have also reported that the fear of dismissal is very real. Similarly, Alexander and Link (2003) have noted (as the Eskom employees suggest) that many people often fear that once they are HIV positive, they will earn less, lose their jobs and/or command less respect in the workplace. This is despite the Employment Equity Act of 1998 that prohibits the discrimination of employees on

the grounds of being HIV positive, except on the basis that it compromises the employee's ability to perform the inherent requirements of a job.

Furthermore, a workplace provides a platform for people to develop social networks that have an important impact on their lives. Research has shown that HIV-related stigma has the potential to destroy these social networks. According to Key and DeNoon (1997), employees often find it difficult to work besides a colleague with HIV/AIDS because of the fear that they might contract the disease. In another study by Steward, Pulerwitz and Williams (2002), similar results were found: most employees who displayed stigmatising attitudes towards their colleagues were uncertain about how HIV can be transmitted. In light of these findings, it is clear PLWA can be victims of isolation and rejection in the workplace, and that implicated in this stigma is poor knowledge, suggesting that the provision of accurate information has some role to play.

While it is evident that HIV-related stigma has negative implications for many companies in South Africa, research also suggests that little is being done to effectively reduce HIV-related stigma (Horizons, 2002). As Dickinson (2005) suggests, it is not easy to translate of theory into effective practice. This appears to be as great a challenge for companies as it is for government and other organisations.

2.10 De-stigmatization of HIV/AIDS

This section offers a very brief mention of some of the issues that need to be considered when devising interventions to reduce stigma. As mentioned numerous times, combating stigma is one of the fundamental elements in the struggle to contain the HIV pandemic (Maughan-Brown, 2006). Yet as also mentioned, its complex nature means that fighting HIV-related stigma remains a challenge. In fact, Parker and Birdsall (2005) argue that interventions must be oriented towards reducing stigma rather than aimed at the unrealistic goal of total eradication.

According to Deacon et al. (2005), there is a great deal of literature on the nature, causes and effects of stigma but much less on what to do about it. In 2007,UNAIDS listed steps aimed at reducing HIV-related stigma as follows:

1. The need of a clear insight of and commitment to the fight against HIV/AIDS-related stigma;
2. Providing leadership on the necessity of reducing stigma and discrimination in national AIDS responses;
3. Incorporation of stigma and discrimination as an integral part of the National HIV/AIDS strategic planning;
4. The provision of funds by the government to institutions fighting against HIV-related stigma.

Similarly, Campbell, Nair, Maimane, and Sibiya (2005) have identified some areas that need to be addressed so as to change stigmatising attitudes in the society, namely:

1. To view stigma reduction as everyone's responsibility;
2. To make provision for accurate information about HIV/AIDS;
3. The creation of social spaces to discuss HIV/AIDS;
4. Critical analysis of root causes of stigma;
5. Understanding behaviours that worsen stigma.

Also, according to Ogdane and Nyblade (2005), the inclusion of people with AIDS in HIV/AIDS awareness programmes is of paramount importance. Similarly, Parker and Aggleton (2002) argue that the inclusion of PLWA in alleviating stigma can demystify and dispel misinformation about HIV/AIDS.

The majority of existing anti-stigma interventions have been designed for wealthy Western nations (Deacon et al., 2009) and the use of such interventions in Africa can be problematic as they may lack contextual value. It therefore follows that anti-stigma interventions must be long-term processes and tailor-made for the contexts for which they are designed (Maughan-Brown, 2009).

The Siyam'kela project (a joint project by various stakeholders including the National Department of Health), formulated in 2003, is a major initiative to combat HIV-related stigma in South Africa. Recognising the paucity of theoretical models to mitigate HIV-related stigma, the Siyamkela project developed some indicators for HIV-related stigma to come up with possible interventions. The project focused on three key areas essential to South Africa's response to HIV-related stigma:

1. The use of Faith-Based Organisations and communities to act as providers of support to people with HIV/AIDS;
2. The involvement of government departments in dealing with HIV-related stigma through reviewing current policies and how to implement them;
3. The empowerment of PLWA to change the perceptions and attitudes of people towards people with HIV/AIDS (UNAIDS 2005).

Two points will be discussed further: the role of media campaigns and the role of Faith-Based Organisations.

Media campaigns play a prominent role in the government's anti-stigma strategies, Kalichman and Simbayi (2003) support the use of media campaigns to reduce HIV-related stigma. Mass media campaigns such as "Soul City" and "Love Life" have been useful in educating people about HIV/AIDS and its effects (Visser & Forsyth, 2009).

Given the persistence of HIV-related stigma in South Africa (Skinner & Mfecane, 2004), the effectiveness of these mass campaigns is, however, in some doubt. Visser and Forsyth (2009) point out that the media must not neglect to emphasise positive stories about people with HIV/AIDS. Positive reporting, they argue, is a powerful tool in changing people's attitudes towards HIV/AIDS. Unfortunately, however, the media have often been accused of exacerbating the stigmatisation of HIV/AIDS by reporting largely negatively about the pandemic, and for showing mainly negative images of people suffering from HIV/AIDS (Visser & Forsyth, 2009).

Brown et al. (2003) have therefore cautioned against relying on mass media campaigns alone as effective ways of dealing with HIV-related stigma. While acknowledging the effectiveness of mass media campaigns in educating people about HIV/AIDS, these authors have noted the need to supplement these campaigns with specifically designed educational programmes to counter the effects of HIV-related stigma. Such a move has the potential to strengthen the power of media campaigns as a tool to fight against stigma.

Many NGOs and some Faith-Based Organisations in South Africa are also taking positive steps in fighting against HIV-related stigma (Parker & Birdsall, 2005). Weaver (2004) has pointed out that NGOs and churches play a fundamental role in assisting communities devastated by HIV/AIDS by providing practical, spiritual, and emotional support to families affected. In fact, according to Visser and Forsyth (2009), NGOs and Faith-Based Organisations are potentially very influential institutions that are capable of changing the attitudes of people towards HIV/AIDS. Faith-Based Organisations in Uganda and in KwaZulu-Natal Province in South Africa

have played an influential role in emphasising HIV/AIDS awareness and education programmes to reduce HIV-related stigma (Parker & Birdsall, 2005). Visser and Forsyth (2009) emphasise the need to empower health workers and Faith-Based Organisations to challenge people's attitudes towards HIV/AIDS and emphasising universal human rights as enshrined in the constitution to create a stigma-free environment.

This is despite the fact that Maughan-Brown (2004) reports that people who belong to a religious group were more likely to be stigmatising than people who are not attached to any religious group, which may be why religious organisations has such an influential role to play.

2.11. De-stigmatisation of HIV/AIDS in the workplace

Despite the South African legislation to protect PLWA, there is evidence that many cases of stigma and discrimination go unreported. Yet, according to a study by Southern Africa HIV/AIDS Information Dissemination Service (2003), the workplace provides an ideal opportunity to address HIV-related stigma as it attracts people from diverse backgrounds. The workplace also provides a captive audience for educational programmes that aim to dispel the myth that there is a need for people to be afraid of PLWA (International Finance Corporation, 2002).

The already mentioned ill-treatment of Mr Hoffman by SAA (as cited by Ngwena, 2001) is one of the examples of discrimination based on HIV/AIDS status in South Africa. The Employment Equity Act 55 of 1998 in South Africa guards against this

sort of discrimination of employees. While tackling discrimination using the law is of the utmost importance, Dickinson (2005) has noted that many people are fearful of reporting stigma as they fear further victimisation, suggesting that there are limits to the protections afforded by legislation.

In response to the problems posed by HIV-related stigma, SAFAIDS came up with various ways to fight against stigma and discrimination in the workplace which include:

1. the development of a workplace policy which focuses on HIV/AIDS and AIDS stigma in line with organisational culture, such as the explicitly stated position of a company when it comes to recruiting employees who are HIV positive and protecting them against all forms of stigma and discrimination;
2. Targeted employment of PLWA as way of showing equality;
3. The provision of counselling and care for employees;
4. The provision of education that prohibits negative attitudes towards PLWA.

However, the extent to which organisations actually do this is unknown.

2.11.1 Workplace policies and their role in the de-stigmatization of HIV/AIDS

The workplace HIV/AIDS policy acts as the company's mission statement on how to deal with HIV/AIDS (Hunt et al., 2003). Despite the fact that HIV/AIDS policies have not been adequately examined in the South African context (Walch, Lezama & Giddie, 2005), some suggest that they remain an integral solution in the fight against HIV-related stigma (Forsyth, Vandormael, Kershaw & Grobbelaar, 2008).

According to Hunt et al. (2003), HIV/AIDS workplace policies should comply with national and international labour laws, protect HIV positive employees against all forms of stigmatisation and discrimination and create an environment that prohibit any kind of discriminatory practice.

Emphasising the importance of an HIV/AIDS policy, Dickinson (2005) has pointed out that it is necessary for organisations to include a statement on HIV/AIDS policy that clearly defines the company's position in creating a stigma free environment. However, the International Labour Organisation (2001) noted with concern the need for more joint exercises between employers and employees to challenge stigma. This involves the inclusion employees and their representatives when developing an HIV/AIDS workplace policy.

By doing so, the policy can receive the support of all role-players, including the management, employees and trade unions. With the participation of both the management and employees, according to Dickinson (2005), only then can a platform be created for proper consultation and negotiation to create an effective workplace policy.

2.12 Chapter summary

The chapter covers some of the vast literature on HIV-related stigma, including the causes of stigma, the problems of defining stigma, some of the challenge of measuring stigma as well as the greatest challenge of all, which is to combat stigma, whether this be in the workplace or in society. In particular, the literature reveals that there is a paucity of research when it comes to developing and validating local HIV-related stigma scales, although some recent local research and new scales holds great promise.

CHAPTER THREE: RESEARCH METHODS

3.1 Chapter preview

This chapter outlines the aims and methods of this study, including a detailed description of the objectives of the study, the research setting, the measurement used, the sample used, statistical analysis used, and the research ethics that were followed.

3.2 Objectives of the study

This research study has two primary objectives:

1. To obtain a measure of personal and attributed HIV-related stigma amongst service staff at two large local organisations in Grahamstown in the Eastern Cape Province.
2. To evaluate and compare the psychometric performance of the two competing South African personal HIV-related stigma scales.

The first aim was to obtain a measure of HIV-related stigma at two of the largest organisations in Grahamstown. In particular, the sample is drawn from the Rhodes University Catering staff and Hi-Tec Security staff. Differences in HIV-related stigma between these two organisations will be considered and discussed in the chapters that follow. Because stigma reduces the likelihood of HIV disclosure and presents an

obstacle to medical treatment and social support (Mfecane & Skinner, 2004), the benefit of this research is that once a reliable, and valid measure of HIV/AIDS stigma in these local contexts is obtained, appropriate interventions can follow and the impact of these interventions can be measured. This component will also include research to determine the relationship between HIV-related stigma and various social and demographic variables, such as race, gender, educational level, age, and four items that give a measure of knowledge of HIV and social distance from HIV (though only three of these knowledge/social distance items were used as one was deemed, in hindsight, to be ambiguous). The second aim is to evaluate and compare the psychometric performance of the two leading South African HIV-related personal stigma scales. These are the HIV-related stigma scales developed by Visser et al. (2008) and the scale developed by Kalichman et al. (2005). Both measures were developed in recent years in order to measure HIV/AIDS stigma in South African contexts and are therefore both relevant to the purposes of this study. To the author's knowledge, these two competing scales have never been directly compared.

3.3 The research setting

The two samples selected for the study are located in Grahamstown in the Eastern Cape Province. The research is relevant particularly to our local context in that the two organisations are among the largest employers in town and this might open opportunities for intervention. Security guards and caterers as part of the semi-skilled workforce are at high risk of contracting HIV. According to SABCOHA (2005), it is believed HIV/AIDS prevalence is significantly higher among semi- and unskilled

workers than among highly skilled and white-collar workers. In a study done by Higher Education Sector (2010), of the 21 Higher Education Institutions surveyed, it was found that the service staff had a higher prevalence of HIV (12%) as compared to academic staff (1.5%) and students (3.4%). The ubiquity of HIV-related stigma and its persistence even in areas where HIV/AIDS prevalence is high makes it an extraordinarily important yet difficult area of research (Brown et al. 2003). Below is a description of the samples under study.

3.3.1 Hi-Tech Security

Hi-Tech Security is a private security company that specialises in alarm systems and mobile security. It employs a total of 300 security guards consisting of 244 men and 56 women (Personal communication, 21 December 2010). The majority of the staff members are black, followed by coloured and white employees. Similarly, the majority of the participants are isiXhosa speaking followed by Afrikaans and then English speakers.³ The company started its operations in 1996 and has now emerged as the dominant security company in Grahamstown and one of the town's largest employers.

3.3.2 Rhodes University Catering Division

The Rhodes Catering Division provides 'in-house' catering service for all its events, functions, conferences and for over 3000 residence students. The service extends to catering for meetings, banquets, sports events, seminars, and workshops within the

³isiXhosa, Afrikaans and English are the main languages in the Eastern Cape Province (Bekker, 2005).

University. Women constitute almost 80% of staff, and the majority of the population are isiXhosa speaking followed by Afrikaans(Personal communication, 21 December 2010).

3.4 The combined sample

The total sample comprised 246 security guards and caterers (n=120 and n=126 respectively) who completed the questionnaires at their workplace. In most studies, researchers rarely survey the entire population for reasons related to costs and accessibility of participants. In this study, the whole population was approached since the total combined population is small enough to manage and locally accessible (though, as it turns out, the security guards were more difficult to access than the caterers), yet large enough to perform an appropriate statistical analysis. The approach of the entire population in this research will obviously minimise the probability of sampling bias or sampling error.

3.4.1 Hi-Tec Security sample

Over a period of four months the researcher attended four consecutive meetings at Hi-Tec Security. One meeting is generally held once a month, but the operational requirement mean that only 75 security guards are allowed to attend at one time (and sometimes the same employees will attend consecutive meetings) as the rest need to be on duty. On approaching the participants, the researcher introduced himself and explained the purpose of the survey. After obtaining informed consent from participants the researcher distributed the questionnaires to the participants

together with stationery to complete the questionnaires and return them to the researcher. 120 of 300 participants (a response rate of 40%) completed the questionnaires and returned them to the researcher. The response rate for Hi-Tec security was much lower than that of the catering staff as the nature of their work made it much more difficult to reach all of the employees. Security staff members are posted to various sites across the town and there were few opportunities to meet large groups of employees.

3.4.2 Rhodes University Catering sample

The researcher attended the shift overlap meetings at each of the University's 12 dining halls. The researcher introduced himself and explained the purpose of the research in each and every meeting. After obtaining informed consent the researcher distributed the questionnaires to the participants together with stationery to complete the questionnaires and return them to the researcher. It took a period of two weeks for the researcher to collect the data. This sample was more accessible than that of Hi-Tech Security as the dininghalls are close to each other and the staff is less mobile. A higher response rate was recorded among Rhodes university staff. In total, 126 out of 160 employees (79%) participated in the study.

3.5 The measures

Two recent and competing scales that have been developed in South Africa were used to measure HIV-related stigma levels among participants: The Kalichman scale and the Visser scales. The 12-item Visser scales include three parallel measures: (1)

personal stigma, (2) attributed stigma and (3) internalised stigma experienced by HIV-infected individuals. Though the focus is on comparing personal stigma scales, the Visser attributed stigma scale was also included as this would provide a useful comparison. The internalised stigma scale, however, was not used as the participants were not asked to disclose their HIV status.

The personal stigma scale measures stigmatising attitudes reported by the individual while the attributed stigma scale measures stigma that individuals attribute to their community. The reported internal consistencies of these two relevant Visser scales across two samples ranges from 0.73 to 0.75 for the personal stigma scale and is 0.87 for both samples for the attributed stigma scale (Visser et al., 2008). Evidence of validity was reported for both measures (Visser et al., 2008). An exploratory factor analysis identified two factors for the personal stigma scale that are labelled as *Blame and Judgment* (6 items) and *Interpersonal Distancing* (6 items) (Visser et al., 2008). A two-point (agree or disagree) response format was adopted after researchers noticed that participants tended to select either the 'agree' or 'disagree' options of their original four-point format (Visser et al., 2008).

Given the fact that the Visser scale has only been translated and validated for Sepedi, Setswana and isiZulu speaking people, it cannot be assumed that an English version will be valid for a sample of people who speak isiXhosa or Afrikaans as their first language. Fortunately there are reliable and valid English, isiXhosa and Afrikaans versions of the Kalichman scale, which can be used as a benchmark against which the English version of the Visser personal stigma scale can be compared. If there are major discrepancies between the psychometric properties of

the Visser scale and first-language versions of the Kalichman scales (except for participants who indicate that English is their first language) then it would suggest that only appropriate language versions should be used for samples such as this.

The Kalichman scale consists of 9 items aimed at reflecting feelings towards people living with HIV/AIDS and is available in three language versions: English, isiXhosa and Afrikaans (Kalichman et al., 2005). The scale reports an internal consistency of 0.75 across a large total sample comprising samples from five different communities; the English version achieved an internal consistency of 0.77, isiXhosa, 0.88 and Afrikaans, 0.71 (Kalichman et al., 2005). Evidence of validity is also reported (Kalichman et al., 2005). A two-point response format (agree or disagree) was adopted to minimise the response burden.

In addition to the Visser scales and each of the three language versions of the Kalichman scale (participants were instructed to complete the version of their first language) the full survey also includes various biographical questions, including age, sex, language, race, and education and four items to measure knowledge / social distance from HIV/AIDS. The fourth knowledge / social distance item, asking respondents whether 'HIV/AIDs can be cured' was excluded from the analysis as the item was deemed, in hindsight, to be ambiguous and a poor indicator of HIV/AIDS knowledge: While HIV infection cannot be cured, ARV medicines can and do reverse the onset of AIDS. The complete survey is attached in Appendix A.

Survey questionnaires are generally very efficient research tools in terms of time and effort (Robson, 1993). While the process of abstraction and reduction that

characterises quantitative research may result in the de-contextualisation of human behaviours (Parker 1995), this quantitative approach is an efficient method of obtaining data from large samples of participants, ensuring objectivity, generalisability and reliability of results.

3.6 Statistical analysis

In this study, statistical analysis was employed to provide a sound quantitative measurement of HIV-related stigma levels among the two samples of service staff. The data was captured onto a spread sheet so that the analysis could be performed. StatisticaVersion 9 (a statistics and analytics software package that provides data analysis, data management, data mining, and data visualisation procedures) and Microsoft Excel were used to conduct the analyses. This included both descriptive and inferential statistical analyses.

The internal consistencies of the scales were then calculated to assess the degree to which the items were measuring the same construct, which is a measure of reliability (Henson, 2001). Nunnally (1997, as quoted by Henson (2001), internal consistency scores of 0.60 or 0.50 are acceptable in the early stages of a research on predictor tests, 0.80 for basic research and 0.90 for applied research. Although there has been a great deal of controversy regarding the standard scores of reliability, Spector (1997) points out that the most commonly used reliability score is 0.70. The HIV-related stigma scales used in this research (the Visser scales and the Kalichman scale) all report acceptable internal consistency scores in their original studies (see above).

T-tests (sometimes with adjustments for unequal variances) and ANOVA were used to compare means between stigma scores, while the general linear model was used to assess whether there were differences among the means of stigma scores with regard to demographic. The general linear model is a generalisation of the linear regression model that offers a set of techniques to analyse any univariate or multivariate ANOVA, ANCOVA or regression designs (Howell, 1997). Once regarded as impractical, this more general approach has become possible in recent years with the increasing power of modern desktop computers and computer statistical packages. The demographic variables that were statistically analysed in relation to personal and attributed stigma were (a) gender (b) age (c) education and (d) race.

3.7 Limitations of the design

Given the sensitive nature of the study, some participants might be inclined to offer responses that are socially acceptable rather than factually correct (this is known as social desirability bias). To minimise this bias, participants were not asked to write their names on the questionnaires so as to ensure neutrality, detachment, and reassurance of anonymity.

The planned use of the entire population in this study was based on the assumption that all participants would participate and be able to attend the relevant meetings. While the response rate of the caterers was excellent, the response rate of the security guards was lower than expected; the reason for this, though, was due to the daily, 24-hour operational requirements of the security company and there is no

reason to think that attendance or non-attendance at the meetings had any relationship to people's views of HIV or people with HIV. However, although there may be no reason to think that the security sample is somehow biased, the possibility cannot be ruled out.

A further issue is that the scales used in this study make use of a two-point response set rather than a five point option which provide a wider range of options, which might impact on the variability and reliability of the responses. However, the advantage of this format is that the scales are easy to complete in a context where there is pressure on the participants' time. Also, Visser et al. (2008) found that participants tend to only use the 'agree' or 'disagree' options of their original four-point response format.

Finally, as a cross sectional design, the study is unable to track how individuals' reported stigma scores vary across time. The tracking of stigma across time would be a very useful addition to the literature – but this sort of research should only be done once good valid and reliable measures of stigma have been identified.

3.8 Ethical standards

The research proposal was approved by Research Ethics Proposal Review Committee in the Psychology Department and then by the Humanities Faculty Higher Degrees Committee. Ethical considerations are an essential part of any research design as they serve to protect participants from being ill treated or harmed by researchers. One of the fundamental principles of research ethics, beneficence,

obligates researchers to maximize possible benefits from the research and minimize harms and risks to their subjects (Frankel & Siang, 1999). This research project has the potential to add value to existing literature by expanding our understanding of HIV and AIDS stigma. Researchers' claims about the benefits of their research will rest in large part on their ability to collect useful data (Frankel & Siang, 1999).

Permission to carry out the research within the Hi-tech Security premises and Rhodes University Catering was sought from the management of both organisations. Mindful of the fact that many participants would feel obliged to complete the questionnaire because the research had the support of the management, the participants were explicitly assured of their right not to participate and withdraw their participation at any time should they wish to do so. The researcher ensured that data collection was done anonymously and the raw data was kept confidential. To maximise anonymity, questionnaires did not bear any name of participants. The management and staff will be able to access a copy of the anonymised final report should they wish to see the results, but not the raw data. The participants were assured that there were no right or wrong answers, and thus encouraged to freely express their views.

3.9 Chapter summary

This chapter has outlined the methodology used to assess stigma level amongst the two samples in this research, and clarified the techniques and methods by which data was collected, from whom, where and how many respondents were used. The chapter also describes some of the ethical considerations that were made to

minimise the risk of harm to participants. The research has the approval of the Rhodes University Review Committees and the management of both organisations.

CHAPTER FOUR: RESULTS

4.1 Chapter preview

While the previous chapter focused on the methods of the study, the purpose of this chapter is to present the results of the study, recalling that the main objectives of this study are to obtain a measure of HIV-related stigma amongst service staff and to evaluate and compare the psychometric performance of two local competing personal stigma scales (the Kalichman scale and the Visser scale). This chapter presents the results of the study, including the sample characteristics, the internal consistency of the scales, evidence of validity, and a comparison of the stigma scores in the two samples (these being security and catering).

In total, 246 participants participated in this study. As noted in the previous chapter, the Catering Division recorded a high response rate of 79%, whilst the security guards recorded a lower response rate of 40%. All the participants completed the Visser personal stigma and attributed stigma scales in English (as no other local language versions are available), while 22 chose to complete the Afrikaans version of the Kalichman scale; 224, the isiXhosa version; and none chose the English version.

4.2 Sample characteristics

Table 1 below presents the demographics of the samples. The majority of the participants from Hi-Tec Security are men (66% of the sample) and the majority from

Rhodes Catering are women (82%). The majority of the Hi-Tec sample (60%) is aged between 25 to 34, while only 27% of the catering sample is in that age range. Half of Hi-Tec sample (50%) obtained a matric level certificate while only a quarter of the Catering sample (25%) has a matric or more.

The majority of both samples are black, isiXhosa-speaking participants (83% and 98% for the security guards and caterers respectively). For the total sample, black, isiXhosa-speaking participants dominate (91%), while coloured, Afrikaans-speaking participants (9%) are in the minority, which is a reflection of the demographic profile of the Eastern Cape (Bekker, 2005).

Table 1. Demographic information

		Hi-Tec sample		Rhodes Catering sample		Total	
		n	%	N	%	n	%
Gender	Male	79	66%	23	18%	102	41%
	Female	41	34%	103	82%	144	59%
Age	18-24	8	7%	5	4%	13	5%
	25-34	72	60%	34	27%	106	43%
	35-44	30	25%	37	29%	67	27%
	45-54	10	8%	39	31%	49	20%
	55-60	0	0%	10	8%	10	4%
Education	Primary	19	16%	23	18%	42	17%
	High school	40	33%	70	56%	89	45%
	Matric	60	50%	29	23%	89	36%
	Diploma/Certificate	1	1%	3	2%	4	2%
Language	Xhosa	100	83%	124	98%	224	91%
	Afrikaans	20	17%	2	2%	22	9%
Race	Black	100	83%	124	98%	224	91%
	Coloured	20	17%	2	2%	22	9%

4.3 Internal consistency and scale validation

An analysis to obtain the internal consistencies of the scales was done so as to assess whether the items in all scales measure the same general construct or produce similar scores (Henson, 2001).

4.3.1 The Visser personal stigma scale

The HIV-related stigma scale measuring personal stigma developed by Visser et al. (2008) reports an internal consistency for the entire sample of 246 participants of 0.71 (see Table 2 below).

Table 2. Internal consistency: Visser personal stigma scale

Cronbach alpha: .705265 Standardized alpha: .7083		
Variable	Item-Totl - Correl.	Alpha if – deleted
PS1	0.35	0.68
PS2	0.24	0.69
PS4	0.42	0.67
PS5	0.42	0.67
PS6	0.27	0.69
PS10	0.27	0.69
PS11	0.25	0.69
PS13	0.36	0.68
PS14	0.39	0.67
PS15	0.38	0.67
PS16	0.34	0.68
PS17	0.34	0.68

The item-total correlations are all acceptable and the deletion of any items would only lower the internal consistency of the scale.

In addition, the internal consistency of the Visser subscales (blame and judgement and interpersonal distance) was 0.57 and 0.62 respectively.

4.3.2 The Visser attributed stigma scale.

The HIV-related stigma scale measuring attributed stigma by Visser et al. (2008) reports an internal consistency for the entire sample of 246 participants of 0.80 (see Table 3 below).

Table 3. Internal consistency for attributed stigma (Visser et al. stigma scale)

Cronbach alpha: .800328 Standardized alpha: .799		
Variable	Item-Total - Correl.	Alpha if – deleted
AS1	0.36	0.79
AS2	0.4	0.78
AS4	0.48	0.78
AS5	0.49	0.78
AS6	0.36	0.79
AS10	0.45	0.78
AS11	0.30	0.79
AS13	0.39	0.79
AS14	0.56	0.77
AS15	0.50	0.77
AS16	0.47	0.78
AS17	0.49	0.78

The item-total correlations are all acceptable and the deletion of any items would only lower the internal consistency of the scale.

The data reveals that the internal consistency of the Visser personal stigma scale is a little lower than for the Visser attributed stigma scale, which is consistent with the pattern reported by Visser et al. (2008) in their original study.

4.3.3 Internal consistency of the Kalichman personal stigma scale

The HIV-related stigma scale by Kalichman et al. (2005) reports an internal consistency for the entire sample of 246 participants of 0.63. The internal consistencies of the Afrikaans (n=22) and isiXhosa versions (n=224) is similar to that of the entire sample at 0.65 and 0.63 respectively. None of the participants completed the English version presumably because none regard English as their first language.

Table 4. Internal consistency for Kalichman personal stigma scale

Cronbach alpha: .633670 Standardized alpha: .6427		
Variable	Item-Total - Correl.	Alpha if – deleted
S1	0.31	0.60
S2	0.29	0.61
S3	0.28	0.61
S4	0.13	0.65
S5	0.21	0.63
S6	0.40	0.58
S7	0.40	0.58
S8	0.41	0.58
S9	0.39	0.58

The results also reveal that item 4 (It is safe for people who have AIDS to work with children) only weakly correlates with the total score and its deletion would increase the alpha score. This is the one item in the scale in which the scoring is reversed, which might have something to do with the poor performance of the item.

4.4 Validation

Both the personal stigma scales were validated using findings from previous studies that suggest that people who are tested for HIV/AIDS (Kalichman & Simbayi, 2003), know someone infected (Herek & Capitanio, 1997; Goffman, 1963), and practice safe sex (Herek, 1999) display lower levels of stigma. Therefore, the items that investigate these issues should differentiate stigma scores, and because the sample

is reasonably large, these differences should be statistically significant. In this case, attributed stigma was not considered since it is not known that these items would reflect differences in attributed stigma and in any case the Kalichman measure does not include a scale to measure attributed stigma so no comparison can be made.

4.4.1 Have you been tested for HIV/AIDS?

The means for both the Kalichman scale (means 2.34 and 3.13; $t=-2.94$, $df=244$, $p=0.00$) and the Visser personal stigma scale (means 2.36 and 3.26; $t=-2.79$, $df=244$, $p=0.01$) for those who report having been tested are significantly lower than those who report having not been tested. The social distancing sub-scale of the Visser scale also show a similar pattern of results (mean scores of 1.17 versus 1.72; $t=-2.80$, $df=244$, $p=0.01$) but the differences in the blame and judgment subscale are not statistically significant (mean scores 1.19 versus 1.54, $t=-1.86$, $d=244$, $p=0.06$).

4.4.2 Do you practice safe sex?

Participants who confirmed that they practice safe sex report statistically significantly lower scores on the Kalichman scale (mean scores of 2.46 versus 3.20; $t=-2.29$, $df=244$, $p=0.02$), and the Visser personal stigma scale (means scores of 2.50 versus 3.35; $t= 2.18$, $df=244$, $p=0.03$). Furthermore, the differences for the interpersonal distancing sub-scale are significant (mean scores of 1.25 versus 1.80; $t=-2.34$, $df=244$, $p=0.02$) but for the blame and judgment subscale the differences are not significant (mean scores of 1.25 versus 1.54; $t=-2.34$, $d=244$, $p=0.02$).

4.4.3 Do you know anyone affected by HIV/AIDS?

Participants who confirmed that they know people affected by HIV/AIDS show statistically significantly lower stigma scores as measured by the Visser personal stigma scale (mean scores of 2.41 and 3.40; $t=-2.78$, $df=243$, $p=0.01$). This pattern is repeated for both of the Visser sub-scales: interpersonal distancing subscale (mean scores of 1.24 versus 1.69; $t=-2.09$, $df=2.43$, $p=0.04$), blame and judgement scale (mean scores of 1.17 versus 1.71; $t=-2.59$, $df=243$, $p=0.01$). However, the differences in the scores obtained on the Kalichman scale are not statistically significant (mean scores of 2.53 and 2.76; $t=-0.76$, $df=243$, $p=0.45$).

4.5 General results

Because both the Kalichman personal stigma scale and the Visser personal stigma scale are very similar and to report the results from both scales would increase the risk of Type 1 errors, and because the Visser personal stigma scale reports slightly superior psychometric properties, only the results of the Visser scales are reported in this general results section.

4.5.1 A Comparison of Hi-Tec Security and Rhodes Catering

A comparison of the two samples was done so as to assess and compare the levels of personal stigma between them.

4.5.1.1 A comparison of Visser personal stigma scores

The security sample reports statistically significantly higher personal stigma scores than the catering sample according to the Visser personal stigma scale (mean scores of 4.01 and 1.37 respectively; $t=10.30$, $df=244$, $p=0.00$). It is very clear that the majority of the catering participants are women and the majority of the security guards are men, and because HIV/AIDS stigma is likely to be gendered (Valdiserri, 2002), it is important to determine whether the difference reported between the two samples is the result of the different work contexts or the result of different proportions of men and women in each sample. To do this a factorial ANOVA was calculated with personalised stigma scores as the dependent variable and sex and workplace as categorical predictors. The main effect of sex was found to be not significant ($F(1, 242) = 0.74$, $p = 0.39$) while the main effect of workplace was found to be significant ($F(1, 242) = 82.25$, $p = 0.00$). There was no significant interaction between sex and workplace. These findings indicate that the difference in stigma scores between the two samples is to do with workplace rather than a difference resulting from uneven gender proportions. The graph below displays this finding.

Figure 1.Hi-Tec and Rhodes catering scores

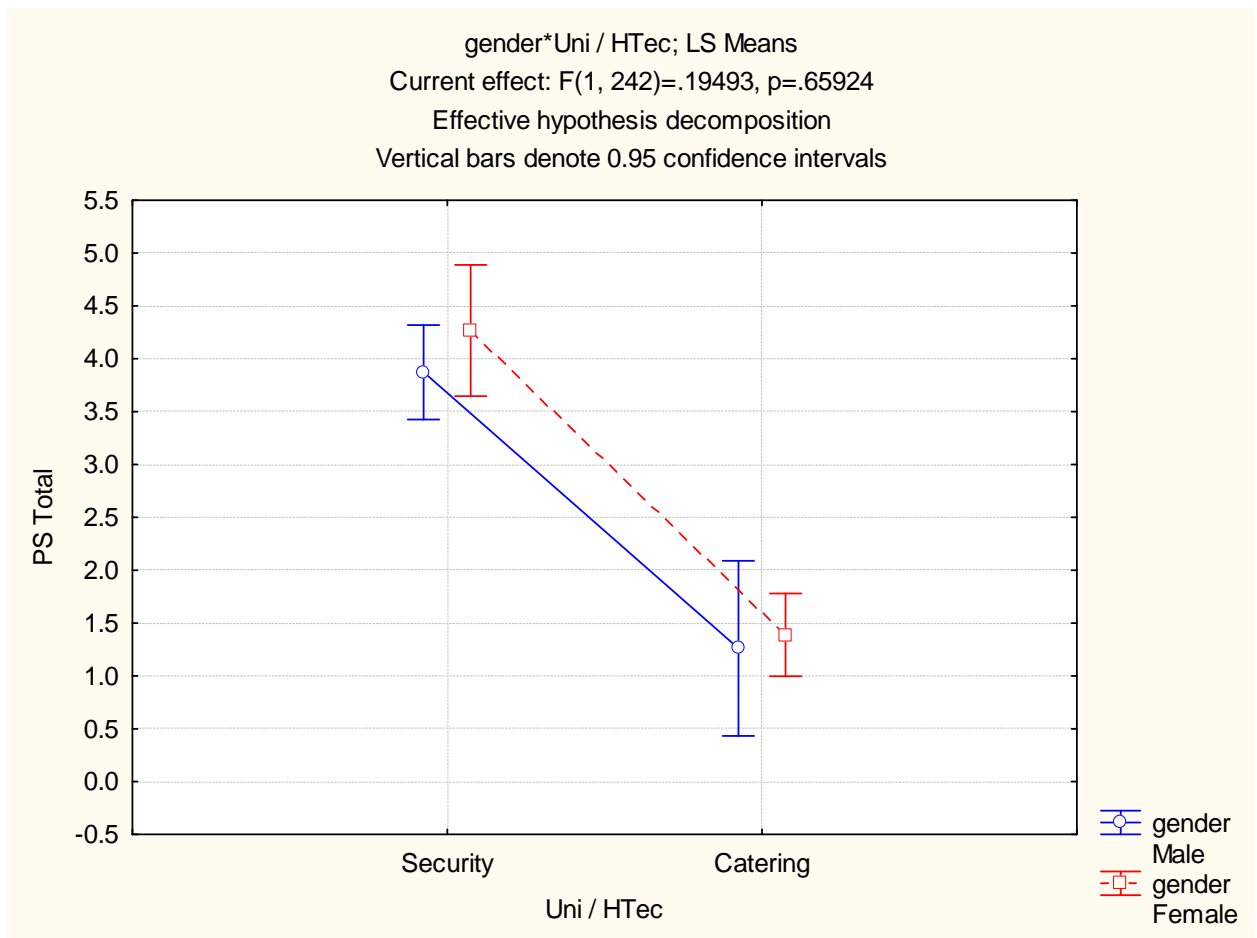


Table 5 provides a comparison between the security and catering samples of the proportions who endorse the personal stigma items. Nearly half of the security samples endorses item 6 (I feel afraid to be around people with HIV/AIDS) while only 11% of the catering sample do so.

Table 5. Comparison between security and catering samples of proportions who endorse Visser personal stigma items

Personal stigma items	Security sample %	Catering sample %
1. I think getting HIV/AIDS is a punishment for bad behaviour	24%	11%
2. I would not like to sit next to someone with HIV/AIDS in public or private transport	18%	11%
3. I think less of someone because they have HIV/AIDS	34%	9%
4. I would not like someone with HIV/AIDS to be living next door	36%	8%
5. I would not like to be friends with someone with HIV/AIDS	42%	21%
6. I feel afraid to be around people with HIV/AIDS	48%	11%
7. People with HIV/AIDS have only themselves to blame	39%	17%
8. I would not employ someone with HIV/AIDS	41%	10%
9. I would not drink from a tap if a person with HIV/AIDS had just drunk from it	37%	8%
10. If you have HIV/AIDS you must have done something wrong to deserve it	35%	11%
11. People with HIV/AIDS should be ashamed of themselves	23%	10%
12. I feel uncomfortable around people with HIV/AIDS	24%	10%

4.5.1.1.1 Visser blame and judgment subscale

Results show that the Hi-Tec Security sample score higher in blame and judgement than Rhodes Catering (mean scores of 1.93 and 0.70 respectively: $t= 7.76$, $df=244$, $p=0.00$).

4.5.1.1.2 Visser interpersonal distancing subscale

Similarly, participants from Hi-Tec Security sample score higher in interpersonal distancing than the Rhodes Catering sample (mean scores of 2.08 and 0.67 respectively; $t=8.60$, $df=218.2$, $p=0.00$ (t-test with separate variance estimates)).

4.5.1.2 Visser attributed stigma scale

As with personal stigma, the security sample reports statistically significantly higher attributed stigma scores than the catering sample according to the Visser attributed stigma scale (mean scores of 4.92 and 7.94 respectively; $t= 8.04$, $df=204.6$, $p=0.00$ (t-test with separate variance estimates). Furthermore, the attributed stigma scores are statistically significantly higher than the personal stigma scores for both groups (security sample: mean scores of 4.00 versus 7.94; $t=-14.55$, $df=238$, $p=0.00$; catering sample: mean scores of 1.37 versus 4.92; $t=-9.71$, $df=193.5$, $p=0.00$ (t-test with separate variance estimates).

Again, because personal stigma is gendered (Valdiserri, 2002), then the same might be true of attributed stigma and the different mean scores reported for each sample simply a gender effect. A factorial ANOVA was calculated with attributed stigma

scores as the dependent variable and sex and workplace as categorical predictors. The main effect of sex was found to be not significant ($F(1, 242)=0.21, p=0.65$) while the main effect of workplace was found to be significant ($F(1, 242)=42.37, p=0.00$). There was no significant interaction between sex and workplace. These findings indicate that the difference in attributed stigma scores between the two samples is to do with workplace rather than a difference resulting from uneven gender proportions. The graph below displays this finding.

Figure 2. Hi-Tec and Rhodes catering scores

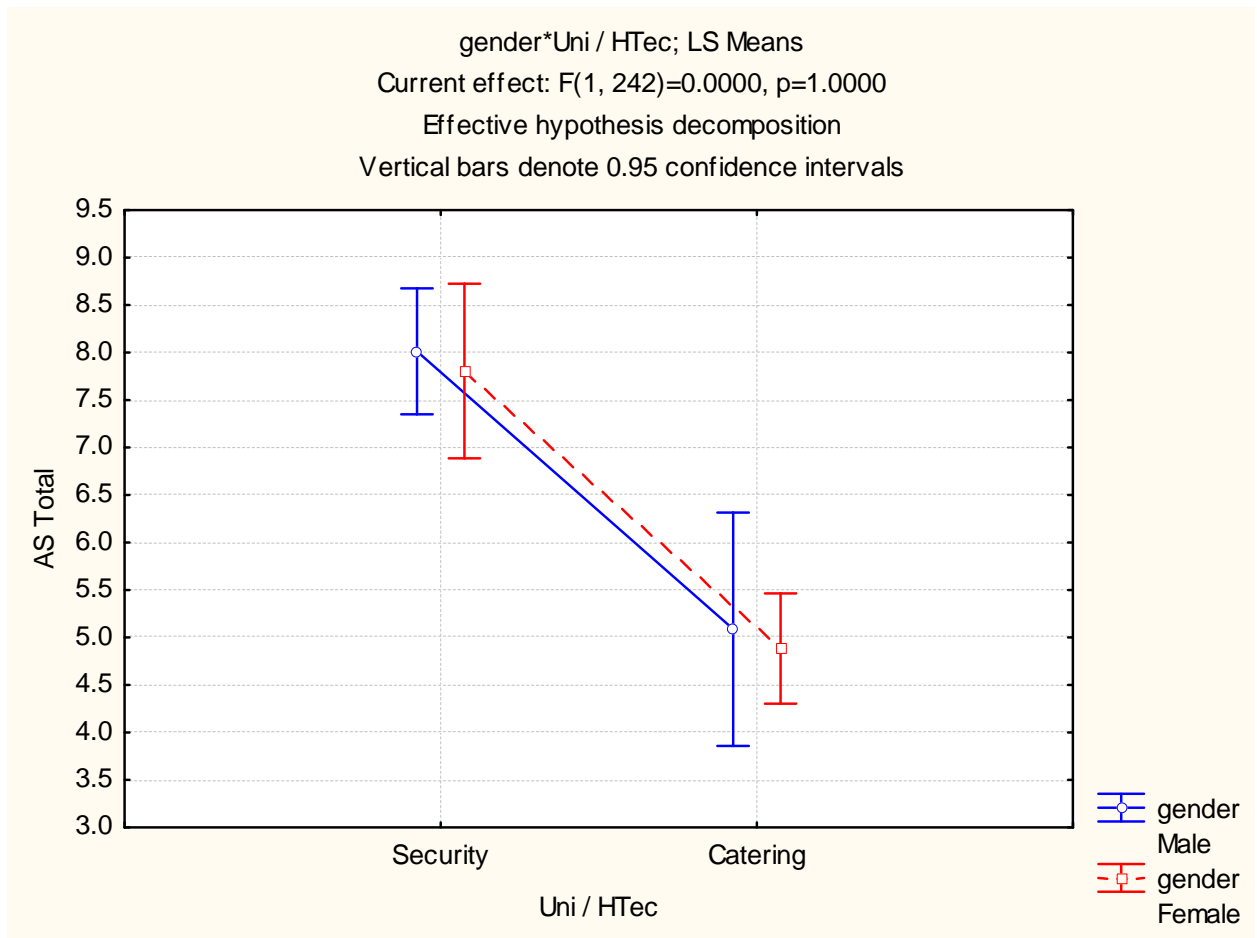


Table 6 provides a comparison between the security and catering samples of the proportions who endorse the attributed stigma items.

Table 6. Comparison between security and catering samples of proportions who endorse Visser attributed stigma items

Attributed stigma items	Security Sample %	Catering Sample %
1. Most people think getting HIV/AIDS is a punishment for bad behaviour	65%	28%
2. Most people would not like to sit next to someone with HIV/AIDS in public or private transport	67%	30%
3. Most people think less of someone because they have HIV/AIDS	71%	51%
4. Most people would not like someone with HIV/AIDS to be living next door	68%	35%
5. Most people would not like to be friends with someone with HIV/AIDS	61%	40%
6. Most people feel afraid to be around people with HIV/AIDS	67%	47%
7. Most people think people with HIV/AIDS have only themselves to blame	63%	55%
8. Most people would not employ someone with HIV/AIDS	27%	48%
9. Most people would not drink from a tap if a person with HIV/AIDS had just drunk from it	72%	38%
10. Most people think if you have HIV/AIDS you must have done something wrong to deserve it	73%	37%

11. Most people think people with HIV/AIDS should be ashamed of themselves	68%	38%
12. Most people feel uncomfortable around people with HIV/AIDS	63%	40%

4.6 Visser personal stigma and demographic variables

Using the general linear model, with the total personal stigma scores as the dependant variables and gender, age, education, race and language as categorical predictor variables, the only significant effect is the workplace setting ($F=78.7$, $p=0.00$). The remaining variables, gender ($F=0.09$, $p=0.77$), age ($F=1.09$, $p=0.37$), education ($F=2.09$, $p=0.10$), race ($F=0.56$, $p=0.46$) and language ($F=0.28$, $p=0.59$), were not significant.

Similar results were also found for the Visser subscales. The results for the interpersonal distancing subscale are as follows: work setting ($F=75$, $p=0.00$), gender ($F=0.02$, $p=0.88$), age ($F=0.90$, $p=0.48$), education ($F=1.08$, $p=0.36$), race ($F=0.20$, $p=0.66$) and language ($F=0.11$, $P=0.74$). Similarly, the results for the blame and judgment subscale are as follows: work setting ($F=82$, $p=0.00$), gender ($F=0.10$, $p=0.74$), age ($F=1.61$, $p=0.16$), education ($F=1.92$, $p=0.13$), race ($F=0.56$, $p=0.46$), and language ($F=0.27$, $P=0.21$).

4.7 Attributed stigma and demographic variables

Using the general linear model, with the total personal stigma scores as the dependant variables and gender, age, education, race and language as categorical predictor variables, the only significant effect is the workplace setting ($F=38$, $p=0.00$). Again, gender ($f=0.15$, $p=0.69$), education ($F=1.06$, $p=0.37$), race ($F=0.28$, $p=0.60$), age ($F=0.84$, $p=0.52$) and language ($F=0.10$, $p=0.75$) are not significant.

4.8 Chapter summary

This chapter presents the results of the study. Results show that the Visser personal stigma scale reported slightly better psychometric properties than the Kalichman personal stigma scale. In comparing stigma scores for the two samples, results show that personal and attributed stigma is higher for the security sample than it is for the catering sample. In comparing attributed and personal stigma, results show that attributed stigma scores are higher than personal stigma scores for both samples. Differences according to the range of demographic variables, apart from the workplace setting, are not significant.

CHAPTER FIVE: DISCUSSION OF THE RESULTS

5.1 Chapter preview

This chapter presents a discussion of the research findings within the context of the reviewed literature pertaining to HIV/AIDS stigma. The results are discussed with particular reference to the objectives of the study.

5.2 Demographic results

Given that the majority of participants (66%) from the security sample are men and the majority of the participants (82%) from the catering sample are women, it was important to determine whether the notable differences of personal stigma scores between the two samples was the result of this gender bias. The results, however, suggest that the differences are the result of the different workplace setting rather than the sex of the participants. This is surprising as the literature would suggest that women would normally be more compassionate (which presumably means less stigmatising) towards people with HIV (Valdiserri, 2002).

Both men and women in the security sample report higher personal stigma scores than the men and the women in the catering sample. The different proportions of men and women in each of the two samples may have to do with socially-constructed notions of masculinity and a resulting informal segregation of the labour market. Indeed, according to Cross and Bagilhole (2002), occupational segregation by sex is undoubtedly a universal characteristic of the labour market.

Generally, men are more likely to be attracted to (and more likely to be hired in) jobs that require physical activity than women, thereby resulting in occupational segregation. An example of this is a study done by the Equal Opportunities Commission (2001) in the United Kingdom where gendered employment patterns were found to be a characteristic of the labour market, with women dominating in catering jobs while men dominated in jobs requiring physical activity such as truck drivers. South Africa, as arguably a more patriarchal society than the UK, is likely to at least reflect these gendered employment patterns.

Similarly, the results also indicate that security participants are generally younger than the catering participants. Most of the security participants fall in the 25-34 age range, while most of the caterers fall in the 45-54 age range. The common perception is undoubtedly that security guards should be tough and active and, thus, a young and active (and male) workforce is regarded as a necessity for many security firms. This is what employers and the clients would expect. As will be discussed in the sections below, the gendered nature of the different occupations has implications for normative HIV-related stigma. But first I discuss the reliability of validity of the scales.

5.3 Internal consistency and scale validation

Recalling that one of the objectives of the study is to compare and evaluate the psychometric performance of the scales, a discussion of the performance of the scales is considered in this section.

5.3.1 Internal consistency

As indicated, internal consistency is a measure of the degree to which items on test jointly measure the same construct (Henson, 2001). Although there has been a great deal of controversy regarding the standard scores of reliability, Spector (1997) points out that the most commonly used reliability cut-off score is 0.70. In this study the cut of point of 0.70 was therefore used as a benchmark when comparing the psychometric performance of the scales.

The Visser personal and attributed stigma scales report internal consistencies of 0.71 and 0.80 respectively. Thus, according to the commonly used cut-off of 0.70, both internal consistencies are acceptable. It is also important to note that the internal consistencies of the English-version Visser personal and attributed stigma scales are good even though English is not the first language of most of the participants. Perhaps the concerns about matching measure to first language are somewhat overstated. Measures such as these with short and relatively unambiguous items are probably easily transportable across language contexts as long as the respondents have a reasonable proficiency in English.

The Kalichman scale obtained an internal consistency score of 0.63 which is slightly lower than the commonly used cut-off point of 0.70. While one might ordinarily expect the shorter scale to have a lower internal consistency than a longer scale, the item analysis also indicates that one of the items of the Kalichman scale (item 4) correlates only weakly with the total and has a negative impact on the internal

consistency, which is all the more problematic given that the scale is already rather short at nine items. This is the only item where the phrasing and scoring is reversed, so perhaps some people, in their haste, did not notice this change and answered the item incorrectly, in the direction not intended. This should perhaps be explored in future research by comparing responses and versions where the phrasing of this and other items is reversed.

Further, this score is also lower than the internal consistency reported by the developers of the scale (Kalichman et al., 2005), which is likely to be a sampling difference. However, acknowledging the misconceptions that many researchers make about low Cronbach alphas (internal consistency scores), Yu (2001) warned researchers against interpreting scales with lower Cronbach alpha as problematic without considering the cause. If indeed small sample sizes destabilises internal consistency as noted by Charter (1999), the anomaly between the Cronbach alphas in the present study compared to the results reported by the developers of the measure might be because of the fact that their sample is nine times larger (at 2306 participants) than the present sample (which involved 246 participants). This therefore suggests that even though the Cronbach alpha for the Kalichman scale is reportedly lower than the cut of point of 0.70, larger samples might result in higher Cronbach scores. But this does not explain the discrepancy between the internal consistencies of the Kalichman scale and the Visser personal stigma scale.

Another factor that may be relevant is that the participants completed different language versions of the Kalichman scale while only the English versions of the Visser scales were used. While the developers put a great deal of effort into making

the different language versions equivalent to each other and to the original English version, the translation process is never straightforward as it is difficult to find words and phrases that are equivalent to those used in the original version of the scale. Often the translated versions report slightly inferior psychometric properties than the original (Young & Edwards, In Press). Therefore, the use of the different language versions that approach but do not quite reach absolute equivalence might slightly depress the overall internal consistency.

So although a great deal of work has gone into ensuring that the different language versions of the Kalichman scale are equivalent (and the similar internal consistency scores for the different language versions suggests that the developers have done a good job in this regard), it is inevitable that slight differences in meaning and emphasis remain, which might slightly lower the overall consistency.

While it is important for researchers to consider indicators of reliability, Henson (2001) points out that the internal consistency coefficient is not a direct measure of reliability but rather theoretical estimates derived from the classical test theory. Furthermore, although the reliability of the Kalichman scale is lower than that of the Visser scales, reliability is not the only consideration when it comes to assessing the utility of a scale. There is an inevitable trade-off between reliability and the length of the scale: The brevity of the Kalichman scale might be an advantage in large epidemiological studies where a number of scales are used and the total number of items becomes an issue (alongside the fact that it is available in three different South African languages that are common in the Eastern and Western Cape).

5.3.2 Validation of the two personal stigma scales

To provide evidence of validity of the two competing personal stigma scales, the differences in stigma scores according to whether respondents report that they have been tested for HIV/AIDS, report that practice safe sex, and report being affected by HIV/AIDS are considered. Although one might expect attributed stigma to correlate strongly with personal stigma, it is not certain that these three validation items would differentiate attributed stigma scores in the way one would expect them to do on the personal stigma scores and so the Visser attributed stigma scale was excluded from this analysis. In any case, an aim of this study is to compare the two competing personal stigma scales.

Previous research has indicated that, since stigma is known to be a barrier to seeking HIV/AIDS testing and other sexual health services (Fortenberry et al., 2002), positive answers to the question “Have you been tested for HIV/AIDS?” are also likely to be associated with lower stigma scores. Similarly, since stigma is known to hinder the practice of safe sex (Skinner & Mfecane, 2004), it is expected that those who claim to practice safe sex –by answering in the affirmative to the question “Do you practice safe sex?” - will also generally report lower HIV-related stigma scores than those who do not. Finally, as direct and even vicarious contact with people who are HIV/AIDS positive is associated with reduced stigma (Herek & Capitano, 1997), one would expect that a positive answer to the question “Are you affected by HIV/AIDS?” would generally be associated with lower personal HIV/AIDS stigma scores.

5.3.2.1 Have you been tested for HIV/AIDS?

The two personal stigma scales (Visser personal stigma scale and Kalichman personal stigma scales) report statistically significant differences according to how the participants answer the question of whether they have been tested for HIV/AIDS. In this study about two thirds of the participants report that they had undergone HIV/AIDS testing, while the remaining third have not been tested for HIV/AIDS. Results suggest that participants who were tested for HIV/AIDS displayed statistically significantly lower levels of stigma than participants who were not tested. This is consistent with what one would expect and is evidence for the validity of both the personal stigma scales.

Furthermore, people who are not tested for HIV/AIDS scored statistically significantly higher in interpersonal distancing (one of the two subscales of the Visser personal stigma scale) than people who reported that they had been tested for HIV/AIDS. This is possibly because they perceive themselves as socially distant from people with HIV/AIDS and therefore do not perceive themselves to be at risk of HIV infection and do not need to be tested.

While testing history showed differences on the social distancing subscale, no significant differences were found for the blame and judgment subscale (the second subscale of the Visser personal stigma scale). So while those who seek HIV testing might not perceive themselves to be socially distant from those who are HIV positive, they seemingly hold similar views to those who do not report being tested with regards to the blameworthiness of those who are infected. Perhaps they regard their

own behaviour in being tested as evidence of their responsibility and position themselves in contrast to those who are perceived to be less responsible. This would suggest that reducing perceived social distance between those who are infected by HIV and those who assume (rightly or wrongly) that they are not infected might reduce stigma and facilitate greater uptake of HIV testing. In other words, social distancing inhibits HIV testing.

5.3.2.2 Do you practice safe sex?

In this study, the majority of participants in both samples report that they practice safe sex. The results indicate the participants who practice safe sex report lower scores on both personal stigma scales than those who do not report that they practice safe sex. Again, this is as one would expect and further evidence for the validity of both the personal stigma scales.

Also, those who practice safe sex report significantly lower scores on the interpersonal distancing subscale of the Visser personal stigma scale but not the blame and judgement subscale. The assumption is that people who practice safe sex must perceive themselves to be at some risk of contracting HIV and, thus, do not perceive themselves to be socially distant from those who have been infected by HIV, which is reflected in lower interpersonal distancing scores. However, some of those same people might regard those who are infected as being blameworthy for not similarly practising safe sex.

5.3.2.3 Do you know anyone affected by HIV/AIDS?

While approximately three quarters (76%) of the participants report that they know someone affected by HIV/AIDS, almost a quarter of the participants claim not to know anybody affected by HIV/AIDS. Although we do not have precise local prevalence statistics, it does seem surprising that so many claim not to know anybody affected by HIV/AIDS. While statistics of the HIV prevalence of the Hi-Tec Security Company are not known, a study done by Simbayi (2009) showed that the prevalence of HIV among security guards was similar to that of high-risk groups such as soldiers. Similarly, a report on HIV prevalence carried out at Rhodes in 2008 showed that the prevalence was high, at 12.9% among service staff, compared to students and academic staff (Higher Education Sector, 2009). This would suggest that the local prevalence is relatively high and that most people should at least know somebody affected by HIV/AIDS. A possibility, therefore, is that there are those who choose not to know; perhaps because shame motivates concealment (Gilbert, 1998), resulting in psychological denial.

Participants who confirmed that they know people affected by HIV/AIDS reported statistically significantly lower stigma scores as measured by the Visser personal stigma scale. This finding is in line with Goffman's (1963) idea that a disability becomes normalised in people's minds the more contact they have with the disability. Again, this appears to be further evidence supporting the validity of the scale.

Similar results were found in a study done by Visser et al. (2009). In this study, it was found that people with high levels of exposure to HIV/AIDS develop a better understanding of the fears and stigmatising attitudes HIV-positive people anticipate or experience. This finding was also corroborated by the HSRC study (Shisana & Simbayi, 2002), which found that acceptance of people with HIV/AIDS results from personal contact with people with HIV/AIDS. A comparison of the Visser subscales reveal that participants who claim not to know someone infected with HIV/AIDS scored higher in interpersonal distancing and blame and judgement than participants who report knowing someone affected with HIV/AIDS.

The fact that the Kalichman scale does not statistically differentiate stigma scores in this sample between those who report knowing somebody affected by HIV/AIDS and those who do not, is of interest and casts some doubt on the performance of the measure.

It seems reasonable to assume, then, that by knowing someone who is HIV positive, people are able to develop less stereotypical and more sympathetic views of what it entails to be infected with HIV. However, research also suggests that HIV/AIDS-related stigma is even more pronounced in areas where HIV/AIDS is prevalent (Brown et al. 2003), which contradicts this contact hypothesis. In fact, South Africa reports both high prevalence of HIV/AIDS infections (UNAIDS, 2008) and widespread stigma (Skinner & Mfecane, 2004).

How do we understand the observation that stigma is high in areas where the prevalence of HIV and AIDS is also high? For one thing, HIV infection is largely

invisible, so even when the prevalence is high, visibility remains low and people's prejudices remain unchallenged. Second, as the visibility of HIV/AIDS increases when people develop full-blown AIDS and become sick and then die, stigma might grow as many seek to manage the increasing threat by blaming, and distancing themselves from, those who are infected. In fact, there may well be two conflicting forces: increased contact, which under the right circumstances might reduce stigma by allowing people to be more compassionate towards those who are HIV-positive, and increased fear, which drives stigma. In other words, the benefits of increased visibility are possibly offset against the increased fear. Perhaps as symbolic stigma decreases, instrumental stigma increases. Only a longitudinal study that tracks stigma typologies over time might be able to answer this question.

Another possibility is, then, that increased visibility of HIV/AIDS provides opportunities to reduce stigma for those who are inclined to become compassionately engaged with people who are HIV/AIDS positive as well as opportunities to increase stigma for those who are fearful. In other words, compassion may be the mediator that explains the mixed results. This is an interesting hypothesis that warrants further research.

What does this mean for the validity of the personal stigma scales? If stigma and HIV prevalence are correlated, then one might expect that the item asking participants whether they know somebody affected by HIV/AIDS would not necessarily differentiate stigma scores because increased possibilities of contact does not necessarily reduce stigma. However, it is still reasonable to expect that people who deny knowing somebody affected by HIV/AIDS despite the high prevalence have

consciously or unconsciously chosen not to engage, from a position of fear or shame or blame, resulting in higher personal stigma scores.

Therefore, in conclusion, it is argued that the pattern of results reported for the three items all lend some support to the validity of both the personal stigma scales, though it does seem that the Visser scale has the slight advantage, perhaps as a result of having 12 rather than the 9 items of the Kalichman scale. As far as the Visser scale is concerned, the mean scores differentiates participants who do or do not endorse any of the three validation items in the directions one would expect and the Cronbach coefficient is more than adequate, indicating that this measure can be safely used in other similar contexts, even when English is not necessarily the first language of the participants (though assuming that the participant are reasonably competent in English).

5.4 General results

Because the Visser personal stigma scale appears to have the psychometric edge in comparison to the Kalichman scale for this sample and because to report all the results would mostly be an unnecessary duplication and increase the risk of Type 1 errors, only the general results of the Visser scales were reported in the previous chapter and a discussion of these results follows.

5.4.1. Personal stigma

A comparison of the two samples showed that the Hi-Tec Security guards obtained higher scores on the personal stigma scale than the Rhodes University Catering staff. These higher scores occur across both the subscales of the Visser personal stigma scale: these being the personal distancing and the blame and judgement subscales.

Considering the fact that the majority of participants from the Hi-Tec Security sample are men and the majority of the Rhodes Catering samples are women, one might have concluded that the results from the present study are a reflection of the gendered nature of stigma (Valdiserri, 2002). In this study, however, the main effect of gender was found not to be statistically significant, while the main effect of workplace was found to be significant, thereby suggesting that the difference in stigma scores between two samples might not be a result of the uneven gender proportions but instead the result of the workplace context. Women from the Rhodes Catering sample showed lower levels of stigma than women from Hi-Tec Security, and, similarly, men from the catering sample also displayed lower levels of stigma than men from the security sample.

As mentioned briefly above, this suggests that in this research, the workplace setting, by attracting particular personalities and by influencing the people who work there, may shape the attitudes that people hold towards those who are HIV positive. Although for some the relationship between personality and occupational choice is contested, there is compelling evidence that suggests that personality is a good

predictor of occupational choice (Holland, 1997; Tokar, Fischer & Subich 1998). Therefore, because of the authoritarian nature of their jobs (Rubinstein, 2006), security guards are likely to be tough, strict and perhaps have an authoritarian personality. Authoritarianism, according to a study by Lippa and Arad (1999), has been found to be highly correlated with prejudice. Therefore, from this point of departure, it is reasonable, perhaps, to expect security guards to be more judgemental and thus more stigmatising towards people with HIV/AIDS than the catering sample.

On the other hand, working as caterer is socially demanding and might attract personalities referred by Holland (1997) as 'social types' who are helpful, supportive and who enjoy working with people. It is interesting to note that social types, according to Tokar, Fischer and Subich (1998), score high in agreeableness, which, according to McCrae et al. (2007), is associated with lower levels of stigma towards people with HIV/AIDS.

Given the fact that workplaces policies and HIV/AIDS awareness programmes are powerful tools in stigma reduction (Walch et al., 2005), and that they have a potential to create a stigma free environment (Dickinson, 2003), the differences in reported stigma levels between the two samples might also have something to do with the effectiveness of anti-stigma interventions employed by the two companies. If this is the case, then the active branch of the TAC at Rhodes University can perhaps be credited for successfully lowering HIV/AIDS stigma amongst service staff. While Hi-Tec Security largely depends on HIV/AIDS Education and Training Programs in fighting against HIV-related stigma (Personal communication, 21 December),

Deacon et al., (2005) warned that HIV/AIDS education and awareness programmes alone might not be enough to reduce stigma.

As mentioned, the results at hand show that the workplace was the only variable to be shown to be statistically significant when it comes to personal stigma scores. While educational level was found to be a determinant of stigma in previous studies (Maugan-Brown, 2004), in this study there was no significant difference in the relationship between education level and stigma. The reason for this might have something to do with the fact that most of the participants in this study had achieved similar education levels and perhaps samples with a wider range of educational achievement are more likely to show differences in stigma. Similarly, the majority of the sample identifies as black and the sample does not have sufficient variability in racial groups to test whether race impacts on HIV stigma. Also, the same could be said of language - though even if a language difference in stigma scores did exist, it is likely to be because language is usually a proxy for race or class or because language ability impacts on participants' abilities to understand the items. Interestingly, age and gender were not associated with differences in stigma, which is somewhat surprising. So although workplace was the only significant variable, the sample was perhaps not sufficiently heterogeneous to properly test some of the other variables.

5.4.2 Attributed stigma

The results of the Visser scales shows that attributed stigma was higher than personal stigma for both samples, and that attributed stigma is higher for the security

guards than for the caterers. Similar results were also found in study comparing personal and attributed stigma by Visser et al. (2009). This suggests that people tend to perceive others as being more stigmatising than them. According to the developers of the Visser scales, this might have something to do with a general tendency to view themselves as better as others or perhaps it is easier to be less stigmatising in hypothetical situations than in real life where all sorts of social dynamics come to play (Visser et al., 2008).

Another explanation is that normative estimates of HIV-related stigma are typically overestimated, as they are with other problematic behaviours such as drinking (e.g., Perkins and Wechsler, 1996). One possible source of this overestimation of social norms is that stigmatising behaviour in the form of prejudice or discrimination is salient, and is therefore more likely to be noticed, discussed, and remembered. The result of their salience is that occurrences of HIV-related stigma and prejudice disproportionately influence subsequent estimates of normative HIV-related stigma.

Another factor is that people are more likely to assume that HIV-related stigma and discrimination represent people's personal attitudes rather than attribute these behaviours to atypical contextual factors, and therefore assume that many people's attitudes to HIV/AIDS are more stigmatising than they really are. Sadly, these sorts of occurrences are not uncommon in South Africa (Simbayi et al., 2007), one of the worst example, as mentioned before, being the murder of Gugu Dlamini, an AIDS activist who was killed in 1998 after disclosing her HIV/AIDS positive status on a Zulu radio station.

The problem with overestimated norms is that these might encourage or allow stigma. It is well established that overestimated drinking norms drive excessive drinking behaviour (e.g. Perkins & Wechsler 1996), and the same might be true for normative estimates of HIV-related stigma. Certainly those with deeply stigmatising attitudes might regard themselves as being amongst a comfortable majority when in fact they are a minority. The overestimates would make stigma appear more socially acceptable than it really is. This, if correct, would suggest that a social norms campaign that attempts to correct overestimates of stigma norms might have much to offer.

Indeed, there is a great deal of research on social norms generally (Campbell, 1964; Durkheim, 1951; Perkins, 2007), and how these shape people's attitudes towards HIV/AIDS (UNAIDS, 2008). These norms, according to Ogdane and Nyblade, (2005), contribute to stigmatising attitudes towards people with HIV and promote prejudiced beliefs that people with HIV are somehow socially deviant and deserving of their infections.

Poor media reporting, according to Visser et al. (2009), also fuels stigmatisation of HIV/AIDS in the community by influencing people's normative estimates, especially when the reporting of HIV news is alarmist and creates the perception that stigma is more common or severe than it really is. Acknowledging the implications of bad media reporting, Visser and Forsyth (2009) emphasised the reporting of positive stories about people with HIV/AIDS, which would balance the misperceptions. Media campaigns such as the Soul City have been introduced in South Africa so as to report both the negative and positive stories about HIV/AIDS.

A last point is that attributed stigma is likely to have a profound effect on the behaviour of those who know or suspect that they are HIV positive, curtailing disclosure and preventing social support (Ogdane & Nyblade, 2005). This is unfortunate; and all the more so if the attributed stigma is typically overestimated and fears exaggerated. How people view themselves is likely to be influenced by how they expect other people view them, and these self appraisals might be implicated in a variety of psychological disorders (Young, 2011). Thus, as mentioned, the relationship between perceived norms and actual stigma certainly warrants further research.

5.5 Chapter summary

This chapter was a discussion of results from the study. The Visser personal stigma scale appears to be a slightly more reliable measure of stigma across these settings than the Kalichman scale, although the Kalichman scale might be preferred in some contexts where its brevity and the different language versions are advantageous. The Hi-Tec Security guards were found to be more stigmatising than the caterers. One possible explanation is to do with the personality types these different occupations attract and the influence of organisational culture. Another is to do with the effectiveness of HIV/AIDS interventions implemented by the two organisations. Also, the security guards attribute more HIV-related stigma than the caterers. It is suggested that this attributed stigma, which seems to be an overestimate of social norms, could drive HIV-related stigma. The discrepancies between actual and estimated (attributed) stigma might be a useful site for intervention.

CHAPTER SIX: CONCLUSION

6.1 Chapter preview

This chapter provides a summary and conclusion of the research findings. The value of the study and the recommendations for future research are also discussed.

6.2 Summary of research findings

The first aim of the research at hand was to obtain a measure of HIV-related personal and attributed stigma among service staff in Grahamstown. The second aim was to compare psychometric performances of the two local competing HIV-related personal stigma scales. Results show that security guards displayed higher levels of personal stigma as compared to the catering staff. One of the possible explanations of this finding is to do with the way in which different occupations might attract (and shape) different personalities. Literature has shown that there is a relationship between personality and occupational choice (Holland, 1997), and hence security guards might be more likely to be authoritarian and therefore more judgemental and more stigmatising than caterers who are expected to be social. The implications are that different anti-stigma interventions could be designed for different occupational roles. Also, occupational contexts associated with high HIV-related stigma could be specifically targeted.

The effectiveness of anti-stigma interventions implemented by the two organisations was also pointed as another possible explanation for the differences in stigma levels

between the two samples, though this would need to be directly investigated before any firm conclusions can be made.

The fact that stigma did not vary (in a statistically significant sense) according to the various demographic variables was not expected. However, the sample was perhaps too homogenous to test the relationship between these variables and HIV-related stigma. What was interesting, however, was how workplace context did differentiate mean stigma scores.

Also interesting is that the results also show that participants from both samples scored higher in attributed stigma than personal stigma. The relationship between personal and attributed stigma certainly warrants further research. It is suggested in this thesis that overestimates of normative stigma might enable stigmatising attitudes. This also might suggest a new avenue for anti-stigma interventions: to specifically correct the normative estimates of HIV-related stigma. The media, too, could play an important role in this by ensuring that their reportage of HIV-related stigma is not alarmist.

Though the Visser personal stigma scale seems to be slightly psychometrically superior to the Kalichman scale, the fact that the Kalichman scale is shorter and available in three local languages (and that the three versions report similar internal consistencies) would suggest that both scales are useful additions to researchers' toolkits. The Kalichman scale can be used when brevity is important, such as when the scale is incorporated into larger household surveys, or when the particular different language versions are needed. It is also interesting to note that the

performance of the English-version Visser scale is good even though English is not the first language of most of the participants. Perhaps the concerns about matching measure to first language are somewhat overstated.

6.3 Value of the study

The quantitative measurement of HIV-related stigma provides an opportunity to evaluate the effectiveness of anti-stigma intervention programmes. This study is one of the few to make use of local stigma scales to measure HIV-related stigma in the South African context, thereby providing an opportunity to assess the applicability, reliability, and validity of these scales across settings.

An assessment of the reliability and validity of these scales advances important knowledge that is needed to measure the impact of anti-stigma interventions and track stigma across time and contexts. The study is of value particularly to our local context in that Hi-Tech Security and Rhodes Catering are both among the largest employers in town and the measurement of HIV-related stigma in these two contexts might create opportunities for intervention on a significant scale.

Lastly, the study at hand shows that HIV-related stigma is high among security guards than catering staff. The results are important particularly to the Hi-Tech Security and possibly other security companies as they may consider the need to bolster or reinvigorate their anti-stigma interventions.

6.4 Recommendations for future research

Given that differences in stigma between the two samples might reflect occupational personality types, then more research into the relationship between organisational setting, occupational roles, and HIV-related stigma is warranted, so as to be able to devise specific interventions for different occupational categories. The relationship between increasing visibility of HIV and stigma also warrants further research. This would need to include longitudinal studies that track stigma levels over time so as to explore its dynamic nature.

While this and much other stigma research has been quantitative, it is also important to explore the lived experiences of those who are confronted by and those who endorse attitudes that are deeply stigmatising. This sort of rich data can only add contextual value to the quantitative research.

An intriguing area of study would be the relationship between attributed stigma, which represents estimates of stigma norms, and personal stigma. There is literature in other areas of problematic behaviour and attitude, such as heavy drinking (e.g. Perkins & Wechsler, 1996), that suggest that the overestimated norms are implicated in the problematic behaviour, and that these can be reduced by correcting normative estimates. The same may well be true for HIV-related stigma, which would then offer a useful site for intervention.

Lastly, still further research into the reliability and validity of the two stigma measures across different contexts is needed before we can begin to make any definitive statements on their validity or reliability. This research is still in its infancy, though recent years have seen important developments and the Visser and Kalichman scales are both useful tools. With reliable and valid scales to measure stigma across South African contexts we can begin to collect benchmark data and then evaluate much needed interventions, with the ultimate goal of removing perhaps the most significant barrier to HIV prevention, testing, treatment, and care.

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APPENDIX: SURVEY QUESTIONNAIRE

SECTION A: DEMOGRAPHIC PROFILE OF EMPLOYEES

Kindly respond by means of a tick ().

1. Sex

Male		Female	
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2. Age range

18-24		25-34	
35-44		45-54	
55-60		61-65	

3. Educational background

Primary School	
High School	
Matric	
Post-Matric Diploma or Degree	

4. Race

Black	
Coloured	
White	

5. First language

isiXhosa	
Afrikaans	
English	
Other	

SECTION B: HIV/AIDS STIGMA SCALE

1. If English is your first language, then complete B1 only before completing Section C, D and E.
2. Ukuba IsiXhosa lulwimi lwakho lwase khaya phendula uB2 phambi kophendula isekshini yesithathu, yesine neyesihlanu.
3. As Afrikaans U moedertong is, voltooi B1 voordat U C, D, en E voltooi.

B1 ENGLISH VERSION OF THE AIDS-RELATED STIGMA SCALE

Please answer whether you agree or disagree with the following statements

Statement	Agree	Disagree
1. People who have AIDS are dirty		
2. People who have AIDS are cursed		
3. People who have AIDS should be ashamed		
4. It is safe for people who have AIDS to work with children		
5. People with AIDS must expect some restrictions on their freedom		
6. A person with AIDS must have done something wrong and deserves to be punished		
7. People who have HIV should be isolated		
8. I do not want to be friends with someone who has AIDS		
9. People who have AIDS should not be allowed to work		

B2 XHOSA VERSION OF THE AIDS-RELATED STIGMA SCALE

Nceda phendula uba uyavumelana okanye awuvumelani nezi ngcaciso zilandelayo

	Ndiyavumelana	Andivumelani
1. Abantu abane AIDS bamdaka		
2. Abantu abane AIDS baqalekisiwe		
3. Abantu abaneAIDS bafanele ukuba neentloni		
4. Kukhuselekile kubantu abaneAIDS ukuba basebenze nabantwana		
5. Abantu abane AIDS kufanele balindele imiqathango ethile kwinkululeko yabo		
6. Umntu oneAIDS makube kukhona into engeyiyo awayenzayo yaye ufanele ukohlwaywa		
7. Abantu abaneAIDS kufanele ukuba bangahoywa		
8. Andifuni ukuba ngumhlobo womntu oneAIDS		
9. Abantu bane AIDS akufanelanga ukuba bavunyelwe basebenze		

B3 AFRIKAANS VERSION OF THE AIDS-RELATED STIGMA SCALE

Antwoord asseblief of u met die volgende stellings saamstem of verskil

	Ek Stem Saam	Ek Verskil
1. Mense wat VIGS het, is vuil		
2. Mense wat VIGS het, is vervloek		
3. Mense wat VIGS het, behoort hulle te skaam		
4. Dit is veilig vir mense wat VIGS het om met kinders te werk		
5. Mense wat VIGS het, moet sommige beperkings op hulle vryheid verwag		
6. n Persoon wat VIGS het, moes iets verkeerd gedoen het en verdien om gestraf te word		
7. Mense wat MIV het, behoort afgesonder te word		
8. Ek wil nie met iemand wat VIGS het vriende wees nie		
9. Mense wat VIGS het, behoort nie toegelaat te word om te		

SECTION C: PERSONAL STIGMA

Please complete all remaining questions in English even if your first language is not English

Please mark the appropriate column with a tick (), which represents your response

Note that there are no right or wrong answers.

Statement	Agree	Disagree
1. I think getting HIV/AIDS is a punishment for bad behavior	<input type="checkbox"/>	<input type="checkbox"/>
2. I would not like to sit next to someone with HIV/AIDS in public or private transport.	<input type="checkbox"/>	<input type="checkbox"/>
3. I think less of someone because they have HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>
4. I would not like someone with HIV/AIDS to be living next door	<input type="checkbox"/>	<input type="checkbox"/>
5. I would not like to be friends with someone with HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>
6. I feel afraid to be around people with HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>
7. People with HIV/AIDS have only themselves to Blame	<input type="checkbox"/>	<input type="checkbox"/>
8. I would not employ someone with HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>
9. I would not drink from a tap if a person with HIV/AIDS had just drunk from it	<input type="checkbox"/>	<input type="checkbox"/>
10. If you have HIV/AIDS you must have done something wrong to deserve it	<input type="checkbox"/>	<input type="checkbox"/>
11. People with HIV/AIDS should be ashamed of themselves	<input type="checkbox"/>	<input type="checkbox"/>
12. I feel uncomfortable around people with HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>

SECTION D: ATTRIBUTED STIGMA

Please complete all remaining questions in English even if your first language is not English

Please mark the appropriate column with a tick (), which represents your response
Note that there are no right or wrong answers.

Statement	Agree	Disagree
1. Most people think getting HIV/AIDS is a punishment for bad behavior	<input type="checkbox"/>	<input type="checkbox"/>
2. Most people would not like to sit next to someone with HIV/AIDS in public or private transport	<input type="checkbox"/>	<input type="checkbox"/>
3. Most people think less of someone because they have HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>
4. Most people would not like someone with HIV/AIDS to be living next door	<input type="checkbox"/>	<input type="checkbox"/>
5. Most people would not like to be friends with someone with HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>
6. Most people feel afraid to be around people with HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>
7. Most people think people with HIV/AIDS have only themselves to blame	<input type="checkbox"/>	<input type="checkbox"/>
8. Most people would not employ someone with HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>
9. Most people would not drink from a tap if a person with HIV/AIDS had just drunk from it	<input type="checkbox"/>	<input type="checkbox"/>
10. Most people think if you have HIV/AIDS you must have done something wrong to deserve it	<input type="checkbox"/>	<input type="checkbox"/>
11. Most People think people with HIV/AIDS should be ashamed of themselves	<input type="checkbox"/>	<input type="checkbox"/>
12. Most people feel uncomfortable around people with HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>

SECTION E: GENERAL HIV QUESTIONS

Please answer all questions

Please mark the appropriate column with a tick (), which represents your response
Note that there are no right or wrong answers

1. HIV/AIDS can be cured?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

2. Have you been tested for HIV/AIDS?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

3. Do you know of anyone affected by HIV/AIDS?

Yes	1	No	<input type="checkbox"/>
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4. Do you practice safe sex?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
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