



***Norming and scaling sensitive behaviour in a student population at the University of KwaZulu-Natal.***

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Masters in Psychology

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12/2/2016

Submitted in partial fulfillment of the requirements for the degree of Masters in Research Psychology (M.Soc. Sci, Psychology). School of Applied Human Sciences, Faculty of Humanities, Development and Social Sciences, University of KwaZulu-Natal, Pietermaritzburg, South Africa, 2016.

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I, Hafsah Shaik, declare that

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Student Name: Hafsah Shaik

Date: 02 December 2016

Name of Supervisor: Vernon Solomon

A handwritten signature in black ink, appearing to read 'Hafsah Shaik', is written over a horizontal line.

Signature

### *Acknowledgements*

Thank you to all those that have assisted with this project. I appreciate all that was contributed towards the completion of this project and my accomplishments in life.

## *Abstract*

This research aimed to norm and scale sensitivity amongst the student population at the University of KwaZulu-Natal (Pietermaritzburg campus). The focus of this research was to validate the sensitivity of a range of sensitive and non-sensitive behaviours used in previous research at the University. This is essential in order to determine if the behaviours studied at the University were in fact sensitive for the student population.

A pilot study was used in order to inform the questionnaire wording and social desirability scale used to norm and scale sensitivity amongst the student population. This research also made use of direct response options for comparison with the findings obtained from the norming option. A quantitative between subjects' experimental research design, utilizing purposive sampling of students between the ages of 18 – 35 was used as a means of norming and scaling sensitivity at UKZN.

This research was able to validate sensitivity for a wide range of behaviours previously considered to be sensitive by researchers at the University. A total of 44 out of the 186 behaviours previously studied at the University was considered sensitive by the student population. However, this study was not able to find a definitive link between social desirability bias and the results obtained.

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## Abbreviations and Symbols

### Abbreviations

ACASI	Audio Computer Assisted Self Interview
AIDS	Acquired Immune Deficiency Syndrome
FTFI	Face-to-Face Interview
HIV	Human Immunodeficiency Virus
ICVI	Informal Confidential Voting Interview
RRT	Randomised Response Technique
SDS	Social Desirability Scales
SRQ	Self-Report Questionnaire
UCT	Unmatched Count Technique
UKZN	University of KwaZulu-Natal (Pietermaritzburg campus)

### Symbols

#	Sensitive Items
*	Criterion 1
**	Criterion 2



## Chapter 1 - Introduction

Researchers are faced with a methodological issue with regards to the term “sensitive” as it is often defined through the use of descriptions which are ambiguous and which are reliant on the researcher’s perceptions of sensitivity. These descriptions include; risky, private, stressful, taboo, sacred, illegal, stigmatising and/or as behaviours which have consequences for those involved. This results in the term “sensitive” being used as though it were self-explanatory and common-sensical. Researchers who contribute to these common sense assumptions (by not explicitly defining sensitivity) include (Faberow, 1963; Sieber & Stanley, 1988; Lee & Renzetti, 1990; Tourangeau & Yan, 2007).

This has led to numerous studies being conducted as ‘sensitive research’ by various researchers (Dalton, Wimbush, & Daily, 1994; Labrie & Earleywine, 2000; Gregson, et al., 2004; Chaudhuri & Christofides, 2007; Coutts & Jann, 2008; Van der Elst, Okuku, Nakamya, Muhaari, & Davies, 2009; Langhaug, Sherr, & Cowan, 2010), who based on the available literature, consider various behaviours such as the “private aspect of alcohol, drug related, financial, abortion, criminal and sexual behaviours” to be considered as *sensitive* and thus in the domains of *sensitive research* (Shaik, 2013).

The University of KwaZulu-Natal (Pietermaritzburg campus) has conducted a series of studies investigating many of the behaviours regarded as sensitive by the above mentioned researchers, especially the behaviours which are considered to be risky sexual behaviours. Studies which were conducted amongst the student population and which emanated from the authors mentioned above, include coercive sex (sex which may be considered as forced sex) (Joubert, 2011), transactional sex (sex in exchange for goods) and coercive sex (Shaik, 2012), risky sexual practices and sex under intoxication (Fynn, 2013; Shaik, 2013), to name a few.

These studies have produced significant findings in terms of sensitive research; however, the need still arises to discover what is *sensitive*. In so doing, researchers may be able to accurately differentiate between sensitive and non-sensitive behaviours in conjunction with their participants views of sensitivity.

This study has utilised a range of sensitive and non-sensitive behaviours which have been previously used in studies conducted amongst the student population at the University of KwaZulu- Natal (Pietermaritzburg campus) in an attempt to verify the behaviours regarded as sensitive.

Previous research by Masters' students (Fynn, 2013; Shaik, 2013) has been conducted in an attempt to norm and scale sensitivity within a student population by measuring a range of sensitive and non-sensitive behaviours amongst the student population. However, factors such as a lengthy questionnaire and confusion resulting from the question posed may have hindered the results.

Therefore, this study has utilised a pilot study, which was conducted by Honours students (Kikia & Phillip, 2014), in order to discover the preferred question format, by testing the 2013 norming question along with a range of other norming options, and two social desirability short-form scales, namely the Hays et al. (1989) 5 item Social Desirability Scale and the Reynolds (1982) 13 item Social Desirability Scale in order to establish the most efficient question format for norming and scaling sensitivity and the most reliable social desirability scale.

The results of the pilot study revealed that the preferred question format for norming sensitivity is *"I would NOT want anyone to know the following about me, because it is so sensitive."* The scale most efficient in detecting social desirability bias for the student population was the *Reynolds (1982) 13 item social desirability scale*.

This study is important as it is the first of its kind to utilise a pilot study in an attempt to investigate how best to ask the norming question amongst the student population. This is important in terms of dealing with the concerns raised in the norming study (disclosure rates as a form of validity) (Fynn, 2013; Shaik, 2013), as well as to inform research into sensitive behaviours at UKZN.

Overall research into sensitive issues is important to social science and public health researchers as obtaining criterion validity can be costly and somewhat impossible for researchers. This means that researchers have to rely on self-reports obtained from participants (as a form of validity) in order to inform future research and draw conclusions on important topics such as HIV transmission, STI's, corruption and other similar issues.

## Chapter 2 – Literature Review

It is of fundamental importance to understand how sensitive research and sensitive issues have been described by researchers in order to understand some of the assumptions held by researchers. This review will highlight the problems with these assumptions as well as look at why research into these topics is important. This review will then highlight the challenges of conducting sensitive research, such as disclosure rates of sensitive behaviours and the problem of social desirability bias. This review will conclude by discussing the norming study (Fynn, 2013; Shaik, 2013) and the pilot study (Kikia & Phillip, 2014) conducted at UKZN, in an attempt to inform the rationale for this study.

### 2.1 Sensitive research

Research into sensitive behaviours is important as many address society's most pressing issues such as racism, risky behaviours related to drugs, sex, alcohol, abortion, religious and political issues. Research into these issues creates awareness, informs intervention programmes, the public and future research aimed at benefiting individuals (Dickson-Swift, Liamputtong, & James, 2008).

When researching sensitive behaviours, researchers often find research which is out-dated (Lee & Renzetti, 1990) (Faberow, 1963), dictionary descriptions of sensitive behaviours (Noland, 2012), problems associated with sensitive research (Tourangeau & Yan, 2007), ethical considerations of doing sensitive research (Draucker, Martsolf, & Poole, 2009), methods used for researching sensitive behaviours and disclosure rates for sensitive behaviours (Chaudhuri & Christofides, 2007) to name a few, all of which will be reviewed below. However, very little research has been conducted in order to establish *what is sensitive* and/or which provides distinct criteria through which sensitivity may be defined and which can be used with confidence by researchers wanting to study sensitive behaviours.

#### 2.1.1 Perceptions of sensitivity

When posing the question, “what is sensitive research?” various common-sensical explanations are provided, which overlap with the dictionary definition of what is sensitive, namely something which is “kept secret” or something which is capable of “endangering the security” of an individual (Oxford dictionaries online, 2004, para. 3). These descriptions also provide insight into the types of questions used in sensitive research (Section 2.1.2) and the threats associated with each of these questions (Section 2.1.3).

These descriptions include the assumption that sensitive research deals with topics which are “taboo” (as cited in Dickson-Swift, Liamputtong, & James, 2008, p. 2), or which cause discomfort to individuals when discussing them, due to them creating a sense of guilt or shame in an individual (Noland, 2012, para 9). Defining sensitivity in these terms can lead to much confusion as the definition of taboo is ambiguous, where some researchers define taboo as topics which “are laden with emotion or which inspire feelings of awe or dread” (as cited in Dickson-Swift, Liamputtong, & James, 2008, p. 2).

However for others the definition of taboo is heavily culturally determined and is subject to norms and social approval, as taboo may also mean gay, incest, mixed marriages and the like in some countries. This in itself proves problematic as cultural and social norms differ for various people and places and there would be no clear indication of what taboo is, and therefore there would be confusion in terms of what sensitivity would be. Suggesting discomfort implies that the topic delves into a person’s private sphere, thereby implying that this information should be “kept secret”.

Delving into individuals’ private spheres may result in danger to both the researcher and those researched, especially if the information obtained is incriminating or illegal. This is in accordance with the second half of the dictionary definition, namely “endangering a person’s security.” Researchers who utilise this assumption regard sensitive issues, as those issues which contain “consequences or implications” or “poses a threat to those involved” or as issues which are “*intimate, discreditable or incriminating*” (Draucker, Martsolf, & Poole, 2009; Sieber & Stanley as cited in Dickson-Swift, Liamputtong, & James, 2008, p. 1; Lee & Renzetti, 1990). However, a lot of health and social science research fits into this category, especially research dealing with sex, sexual abuse, drug use, violence, death, birth and cancer (Dickson-Swift, Liamputtong, & James, 2008).

Furthermore, this definition is not very useful as most research has consequences attached to it, either positive (such as creating awareness or informing research) or negative (such as stigmatisation or endangering the security of those involved). Draucker, Martsolf, and Poole, (2009) further suggest that sensitive issues “challenge social value,” however these values differ from person to person.

Defining research that delves into a person's private sphere as sensitive will not be useful in terms of defining sensitivity. This is because each person has a different private sphere and this varies for each individual and their state of affairs. Topics are sometimes deemed as sensitive because of the feelings that they evoke and the perception of risks that they pose and these risks are perceived differently by various people such as gatekeepers, ethics committees, researchers and participants (Draucker, Martsolf, & Poole, 2009).

Since this research aims to determine *what is sensitive for the student population*, sensitivity will be defined as those behaviours which have *low disclosure rates* (despite taking measures to ensure anonymity) and which are *indicated* as *sensitive* by the students in question (through the use of the questionnaire). These questions may pose some kind of threat and/or consequences (See review below) and thus, that may be the cause of low disclosure rates despite the assurance of anonymity, however further qualitative research may be required to determine the cause.

### **2.1.2. Perceptions of Sensitive Questions**

Research suggests that there are three types of sensitive questions, namely, *intrusive questions*, questions which *pose a threat to disclosure* and questions which elicit *social desirability bias* (Tourangeau & Yan, 2007).

Intrusive questions are questions which touch on taboo topics and invade a person's private sphere. These are sometimes regarded as sensitive as these questions are regarded as "an invasion of privacy" and may sometimes be regarded as offensive by the participant. This categorisation is mostly based on the content of the question rather than on the location of the interview (Tourangeau & Yan, 2007). Exploring such questions can result in emotional distress, especially if the issue is related to a traumatic event (Draucker, Martsolf, & Poole, 2009).

The second concept deals with the consequences associated with providing a truthful response to the questions posed. Such questions are sensitive due to the consequences that may be attached to the responses should a third party become aware of the responses provided. However, participants vary in terms of how much they worry about confidentiality and if they feel they have anything to hide and/or any consequences related to their disclosure (Tourangeau & Yan, 2007). Such perceptions affect the overall credibility of research

findings and are a major problem in terms of research into sensitive behaviours as they affect disclosure rates (See Section 2.2.1).

The final concept deals with social desirability. This deals with the extent to which a question requires an answer that may be perceived as socially unacceptable. This concept delves into society's norms of acceptability and unacceptability where deviations from these norms are somewhat unacceptable (Tourangeau & Yan, 2007). However, once again these norms are socially constructed and differ for various people and places.

Just as the interpretation (intrusive, disclosure and/or social desirability) of sensitive questions posed differ from person to person, so does the possible threats (See review below) posed by the responses obtained differ from person to person. These factors all hinder the quality and credibility of the data obtained (See Section 2.2).

### **2.1.3. Threats posed by research questions**

Literature also suggests that these questions (intrusive, disclosure and/or social desirability questions reviewed above) pose some kind of threat to the participants. These threats include; *intrusive threat*, *threat of sanction* and *political threat*. Intrusive threat deals with parts of a person's life that are private, stressful or sacred and these include sexual and/or religious practices (Lee, 1993).

Threat of sanction deals with deviance (not conforming to social norms) and these studies might divulge facts that are "stigmatizing or incriminating in some ways to the participant" (Tourangeau & Yan, 2007). These include studies related to drug abuse which may have some form of illegal behaviour attached to them. Political sanction on the other hand involves researching areas that deal with social conflict, such as police brutality (Lee, 1993).

What is clear from the above reviews, relating to sensitive research and sensitive questions is that researchers utilise what can be labelled as 'the common sense approach' to what constitutes sensitivity by associating emotions, response/nonresponse rates and/or consequences attached to behaviours to determine whether the behaviours should be treated as sensitive or not. This has many problems attached to it, which include, the lack of a distinct definition in terms of sensitivity, which leads to variability depending on context such as political, cultural and social factors, and confusion resulting from ambiguity.

This may be because of sensitivity being treated as something which need not be defined or because of the nature of the research and/or research emanating from current situations which people are not quite ready to disclose information on thus resulting in the research being considered as “sensitive”.

Sometimes research is considered as sensitive based on participant’s responses to questions, where researchers regard behaviours as sensitive due to participants low/ lack of responses in terms of the behaviour in question. Sensitivity could also be analysed as a scale. Where some behaviours may be considered as more or less sensitive than other behaviours in question. Analysing sensitivity on a scale may prove useful for the development of future research methods such as the Unmatched Count Technique II (Chaudhuri & Christofides, 2007) (See Section 2.3). This may be achieved through statistics (based on factor loadings), disclosure rates and/or non-response rates, researchers may categorise behaviours on a scale from low sensitivity to high sensitivity. This in itself is one of the many problems researchers face, some of which will be reviewed below.

## **2.2 The problem with sensitive research**

Sensitive research is reliant on self- disclosures (revealing private information in the form of thoughts, feelings and/or experiences) obtained from the people being researched in order to draw conclusions about matters which may be deemed important. These disclosures or non-disclosures obtained from participants are sometimes the only form of information that a researcher may have available. These disclosure rates determine the quality and credibility of the research conducted, as disclosure rates are often used as a form of validity (Labrie & Earleywine, 2000).

Disclosure rates that are laden with errors in terms of under reporting, non-responses, over-reporting and/or social desirability bias (See review below) can have major problems for researchers. These problems exist in terms of the research itself, policy developers and the people being researched. These problems include; an unstable foundation for future research, inaccurate theory building as well as service personnel and policymakers being misguided in terms of the development of effective programs (Lee & Renzetti, 1990).

### 2.2.1 Disclosure rates

Researchers still struggle to measure sensitive and or stigmatising behaviours which are important in terms of understanding health risks. This difficulty is mostly prevalent in questions related to “drug use, sexual behaviours and illegal behaviours which are usually thought of as sensitive” (Dickson-Swift, Liamputtong, & James, 2008). These behaviours tend to produce reasonably higher non-response rates and/or larger measurement errors in responses than questions on other topics (Tourangeau & Yan, 2007). This is further highlighted as the history of respondents is unknown and therefore regardless of the response format used one may never know the truthfulness behind the responses obtained (Lee & Renzetti, 1990).

Furthermore, sometimes disclosure rates of certain behaviours such as sexual activity, drug abuse, criminal and mental or emotional states can only be researched using self – reports obtained from participants (Brener, Billy, & Grady, 2003). Researchers are unable to validate these self-reports in terms of their accuracy and are often faced with low disclosure rates that cannot be easily explained from the data obtained. Therefore it is important to know whether the behaviours studied are in fact sensitive, as this may affect their ability to admit to the behaviour or to have a full mental recollection of the behaviour.

Participants sometimes struggle to recall all their past behaviours or at times may even misreport their engagement in these behaviours, such as male sexual bragging (Korb, 2011). Further contributing factors which result in the validity and reliability of the study being questionable result from factors such as individuals’ perceptions of the questions, ranging from individuals not understanding the item, not considering the item to be sensitive, experiencing feelings of discomfort and embarrassment because of the question, being unfamiliar with the terms used or the contextual meaning of the terms and social desirability responding (Dickson-Swift, Liamputtong, & James, 2008).

Another contributing factor may be due to the fear of the consequences of admitting to such behaviours; which make it difficult to obtain data on sensitive issues. Regardless of the assurances offered by researchers in terms of confidentiality and guarantees of nondisclosure, participants may still be suspicious of these assurances and this in itself may impact on misreporting of illegal and/or socially undesirable behaviours (Lee & Renzetti, 1990). Validating the responses obtained is also problematic as it can be costly and impractical,



requiring biological endpoints or external validation such as case records and in many cases external validation may not be possible (Shaik, 2013).

Whilst little information is available on gender differences in terms of disclosure, some studies have found no differences (Ong & Weiss, The impact of anonymity on responses to "sensitive" questions, 2000), whilst other studies have found that survey formats may influence males more than females, for example, where anonymity and confidentiality are prioritised in research, men tend to disclose more than women and women tend to disclose decreased rates of involvement of the behaviours in question (Dickson-Swift, Liamputtong, & James, 2008).

With the advancement of technology and considering that many people are prone to disclosing information which is of a *sensitive* nature about themselves on social media, researchers have found that people still have a tendency to skew their levels of disclosure in a socially desirable direction (Dickson-Swift, Liamputtong, & James, 2008). Due to the nature of sensitive behaviours researched and the trend for participants to represent themselves in a favourable way, it then becomes important to include a social desirability scale to deal with such biases (Coutts & Jann, 2008).

Therefore it becomes imperative to develop a study which validates participants' perceptions of behaviours, in terms of sensitivity and non-sensitivity, whilst monitoring the effect of social desirability bias on disclosure rates. This would assist with the question of whether or not the behaviours researched are in fact sensitive for the participants in question and if the responses obtained have been hindered by some form of bias.

This is important as disclosure rates are sometimes used a measure of validity and these disclosure rates are often used to distinguish the efficiency of one method over another in terms of reporting behaviours which are related to issues such as sex, drugs, abortion, death, corruption and the like (Dalton, Wimbush, & Daily, 1994).

The following section will review the effect of social desirability bias and the two shortened versions of the Crowne and Marlowe (1960) social desirability scales, namely the Hays et al., (1989) five item social desirability scale and the Reynolds (1982) thirteen item social desirability scale.

### **2.2.2 Social desirability bias**

In order to avoid stigmatisation, participants may deny engaging in behaviours which are deemed socially undesirable. This is known as social desirability bias (McCosker, Barnard, & Gerber, 2001). “Social desirability bias is detected when individuals present themselves as honourable, virtuous and moral by denying traits which are undesirable yet common, such as jealousy or anger and/or by displaying an increase in traits such as never being late or never lying to others” (Crowne & Marlowe, 1960).

The idea behind social desirability bias is, that participants are afraid to disclose information that might lead to them being judged by society (McCosker, Barnard, & Gerber, 2001). This is visible in questions pertaining to issues which are considered to be personal and which infringe on a person’s private life, and may prevent researchers from compiling accurate information for studies (McCosker, Barnard, & Gerber, 2001).

This particular bias influences studies as it causes a decrease in reports of behaviours which are deemed socially undesirable, such as behaviours that may bring about distress, including “shame, remorse and embarrassment” and/or an increase in reports of behaviours that are considered desirable (Hays, Hayashi, & Stewart, 1989). This can result in research being weakened which can lead to incorrect or untrue categorizing of relationships in research.

Questions that deal with activities that are considered desirable by individuals are most likely to be influenced by social desirability bias (Brener, Billy, & Grady, 2003). In agreement with this view, Van der Mortel (2008) has found that responses which are considered favourable are prevalent when social value is placed on the items being asked in the questionnaire. This is because there are community and social expectations attached to the behaviours that people feel the need to conform to.

On the other hand, some respondents may respond positively to such questions in an attempt to gain attention or self-deception (Van der Mortel, 2008). This may be true for alcohol use, drug abuse, and sexually related behaviours, which tend to have a prevalence of positive responses which are sometimes deemed status amongst certain populations and places (Brener, Billy, & Grady, 2003). Gender differences in reporting also have an impact in terms of social desirability bias, especially in terms of questions related to sexual activity, such that men are most likely to over-report their lifetime partners while women under-report them, which in turn leads to biases in survey estimates (Langhaug, Sherr, & Cowan, 2010).

In an attempt to deal with these issues, social desirability scales can be added to questionnaires (Catania, Mcdermott, & Pollack, 1986). Two such scales will be reviewed below, as they will form part of this study, these include, the Hays et al., (1989) five item social desirability scale and the Reynolds (1982) thirteen item social desirability scale due to the short nature and ease of administration possessed by the scales.

### **2.2.2.1 Overview of the social desirability scales**

Since World – War II researchers have been attempting to measure the propensity for individuals to describe themselves in a favourable way using many social desirability scales (Johnson & Fendrich, 2002). One such scale which has been used is the Crowne and Marlowe (1960) scale, which was developed in an attempt to recognize behaviours which are alleged to be ideal but which are carried out only once in a while. This scale consisted of a total of thirty-three items. However, due to its length many short versions of the scale have been derived from it. Such as the Hays et al., (1989) five item social desirability scale or the Reynolds (1982) eleven, twelve and thirteen item scale which can be included in studies, in order to measure the threat of social desirability bias in studies. These scales have produced significant correlations between positive self-evaluation and over-reporting.

The Hays et al., (1989) scale was derived from the Reynolds (1982) scale. These items were derived from form A of the Crowne and Marlowe (1960) scale. These items were selected due to them having the highest item to item correlation. These scales are considered to cover the “most practical concerns” of researchers who utilise self-report data (Hays, Hayashi, & Stewart, 1989).

These scales consist of a range of questions which were intended to calculate the probability of an individual responding in a favourable way , as opposed to an honest way (Catania, Mcdermott, & Pollack, 1986). These questions were related to character and “attitudes”, and a failure to provide responses which were regarded as socially unfavourable regarding these questions, indicated that the individual was not suitable as a participant (Johnson & Fendrich, 2002).

The scales can be administered by the interviewer (verbally at the beginning or end of an interview) and in most cases attached to the interview sheet as part of the questionnaire. They require minimal time to complete due to their simple format. Respondents are required to

rank each item in the scale according to the Likert scale format with response options which range from “strongly disagree to strongly agree” (Hays, Hayashi, & Stewart, 1989). The rationale for this type of scale is based on the opinion that it is problematic for participants to offer direct responses (true or false) to such questions. Based on these responses, only the most extreme responses are considered to be an indication of social desirability bias (Hays, Hayashi, & Stewart, 1989).

*Table 1: Social Desirability Scales - Psychometric properties*

Psychometric Properties	Scales	
	Hays et al., (1989)	Reynolds (1982)
Format	5 item scale	13 item scale
Scale	1 to 4	1 to 4
Reliability	.66 / .68	.68 / .76 / .89
Validity	Not established	Not established

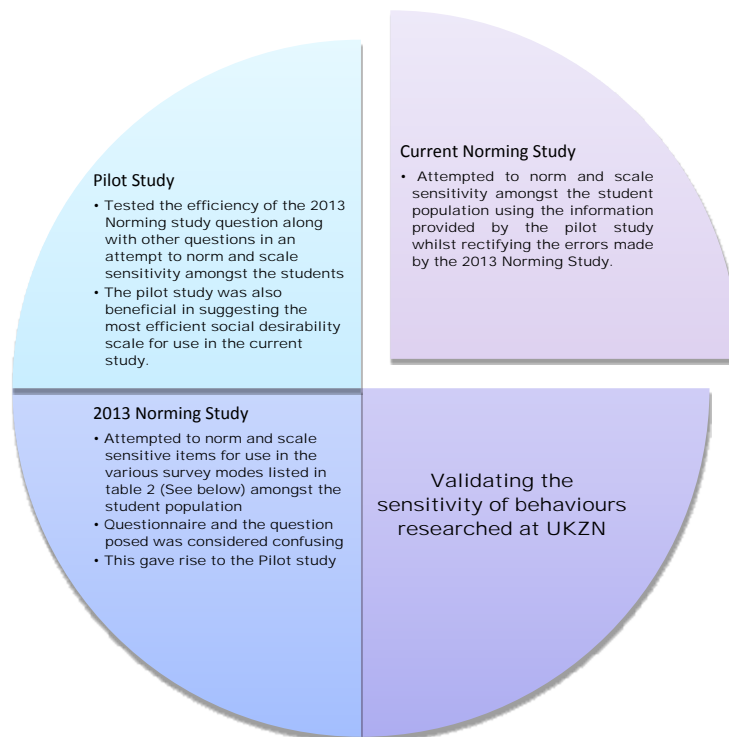
Both scales contain satisfactory reliability coefficients (Reynolds, 1982; Hays et al., 1989). However, for both the scales, their validity had not been established in studies conducted using the scales (Reynolds, 1982; Hays et al., 1989). Some studies have also found that regardless of achieving high social desirability ratings people tend to still admit to behaviours which defy social norms. These include studies related to risky sexual behaviours which have utilised the Hays et al. (1989) five item social desirability scale (Fynn, 2013, Shaik, 2012; Shaik, 2013) and a study related to cocaine use (Johnson & Fendrich, 2002), which utilised the Reynolds (1982) eleven item scale.

Why this may be the case requires further investigation, as the scales have produced satisfactory results in other studies (Kozma & Stones, 1987; Welte & Russell, 1993) and are still widely used to date. Therefore, these scales were compared through the means of a pilot study and the most efficient scale, as determined by the pilot study was utilised in this norming study together with the questionnaire wording as chosen by the student population at the University of KwaZulu-Natal.

Due to no known literature being available in terms of *norming and scaling sensitivity*, this study will review the results of the 2013 norming study conducted by (Fynn, 2013; Shaik

2013) and the pilot study which informed the design of this study(See figure 1 and write-up below 2.3 & 2.4). This will serve to highlight the rationale of the current study in terms of choosing a norming question and social desirability scale that may have been better adapted to assist with norming and scaling sensitivity amongst the student population at UKZN.

**Figure 1- Relationship between the studies**



### 2.3. (2013) Norming Study

The purpose of the 2013 norming study was to norm and scale a range of sensitive and non-sensitive behaviours amongst the student population at the University of KwaZulu-Natal for use in a range of wider studies conducted which utilised various modes of survey, namely the Unmatched count technique (UCT Type I and Type II), Self-Report questionnaire (SRQ), Audio Computer Assisted Self Interview (ACASI), Face-to- face interview (FTFI) and the Informal Confidential Voting Interview (ICVI), all of which were utilised by researchers for various other studies (Fynn, 2013; Shaik, 2013).The following table (Table 2) has been provided in an attempt to provide a brief overview of each of the modes of survey utilised before proceeding to discuss the format of the norming study and the problems experienced.

**Table 2: Modes of Survey**

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Mode of Survey	Description of modes of survey
UCT Type I	<ul style="list-style-type: none"> <li>• Indirect assessment technique</li> <li>• Participants are given a series of statements and are required to indicate only the number of statements which are true for them and not which statements are true for them</li> <li>• Consists of about 5 to 6 items</li> <li>• Only one item is the item of interest</li> <li>• Items are made up of mostly non-sensitive <i>unrelated</i> items (items are not related to the sensitive item)</li> </ul>
UCT Type II	<ul style="list-style-type: none"> <li>• Indirect assessment technique</li> <li>• Participants are given a series of statements and are required to indicate only the number of statements which are true for them and not which statements are true for them</li> <li>• Consists of about 5 to 6 items</li> <li>• Only one item is the item of interest</li> <li>• Items are made up of mostly non-sensitive <i>related</i> items (items are not related to the sensitive item)</li> <li>• Based on Chaudhuri and Christofides (2007) suggestion</li> </ul>
SRQ	<ul style="list-style-type: none"> <li>• Direct assessment technique</li> <li>• Forced choice format</li> <li>• True and false response options</li> </ul>
ACASI	<ul style="list-style-type: none"> <li>• Direct Assessment technique</li> <li>• Computer functions as interviewer</li> <li>• Makes use of an audio format to interact with the interviewee by providing the instructions, question and response options via audio through a headset</li> <li>• Respondent responds by pushing a button based on the instructions</li> </ul>
FTFI	<ul style="list-style-type: none"> <li>• Direct Assessment technique</li> <li>• Traditional form of interview format</li> <li>• Interviewer asks interview questions and is able to probe answers provided.</li> </ul>

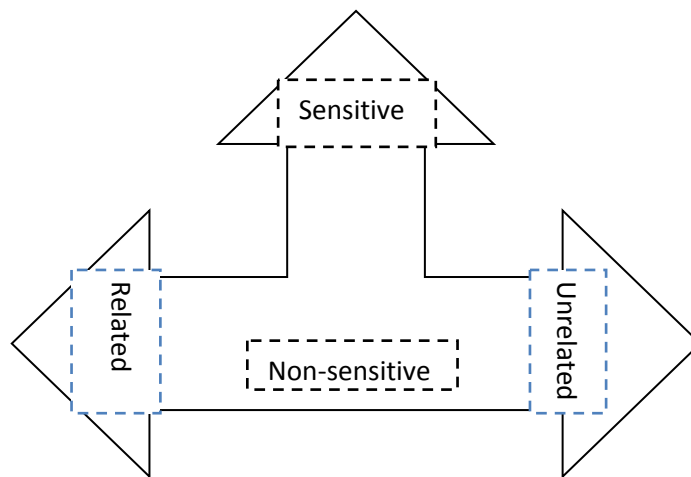
ICVI	<ul style="list-style-type: none"> <li>• Direct Assessment technique</li> <li>• Blend of FTFI and SRQ</li> <li>• Utilises wooden box with screen and a means of confidentiality as the device prevents the interviewer from viewing the response</li> <li>• Interviewer is present however participant responds on a piece of paper which is inserted into a wooden box.</li> </ul>
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The 2013 norming study attempted norm and scale the behaviours used in previous studies at UKZN, before including them in the modes of survey listed above. The study experienced a few problems due to its length and the norming question posed, therefore a subsequent study was required in order to address some of the problems experienced. This current norming study, with the use of the pilot study, is an attempt to address the issues experienced with the 2013 norming study, all of which will be reviewed below.

The items which were being normed and scaled were extracted from various studies (Chaudhuri & Christofides, 2007; Coutts & Jann, 2009; Dalton et al., 1994; Gregson et al., 2004; LaBrie & Earleywine, 2000; Langhaug, et al., 2010; Van der Elst, et al., 2009) and were previously used by various other researchers at the university for the modes of survey comparative studies mentioned above (Alledhan, 2011; Joubert, 2011; Pienaar, 2003). These items were also chosen due to their relevance to social science and public health research, given the prevalence of high risk sexual behavior implicated in HIV and STI transmission in Sub-Saharan Africa. Apart from attempting to gain consensus among the population for the behaviours regarded as sensitive in the domains of risky sexual behaviours and sex under intoxication, the 2013 norming study also aimed to extract items from the non-sensitive category for use in the UCT Type II (Fynn, 2013; Shaik, 2013)

This attempt was the first of its kind and was based on a suggestion made by Chaudhuri and Christofides (2007), of including items related to the behaviour in question, thereby creating a UCT Type II. This meant that the UCT Type I would have non-sensitive items that were general and unrelated to the behaviour in question and that the UCT Type II would have items that were non-sensitive but that were related in some ways to the behaviour in question (See figure 2 below).

*Figure 2 – Item extraction for UCT Type II*



For instance the UCT Type I would enquire about hobbies and preferences whereas the UCT Type II would enquire about health related issues such as condom use, visits to the doctor and their degree of physical contact with a partner, such as light or heavy petting (Fynn, 2013; Shaik, 2013).

Based on the above aim and rationale the 2013 norming study was constructed with this question, “If the item were true for me, I would not want anyone to know about it.” Sensitivity was operationalised in the norming study by asking participants to indicate which of the behaviours, *if they were true for the participant*; they would not like anyone to know about it (Fynn, 2013; Shaik, 2013). The 2013 norming study was a paper and pencil rating sheet and consisted of a total of 186 items and a four point Likert scale with the following options:

- *True for me*
- *Partially true for me*
- *Partially NOT true for me*
- *Not true at all for me*



Since the question seemed lengthy, the question was posed with an example of what was expected and four counter balanced versions of the questionnaire were created with the question printed at the top of each page as a reminder to the participants (See Appendix 1).

The questionnaires were handed out to 360 participants and the results were analysed using factor analysis in order to achieve categories of sensitive and non-sensitive behaviours. Items with factor loadings of .4<sup>1</sup> or greater were included into the study (See Appendix 2). The use of .4 factor loadings was mainly influenced by the data obtained which determined the minimum and maximum values.

Based on the aim of the study, which was to have two categories of non-sensitive items, that is non-sensitive related and unrelated items, the non-sensitive category was split into two. The higher the factor loading in the sensitive category, the more sensitive the item was considered to be, likewise for the non-sensitive category, the higher the loading the least sensitive the item was considered to be. All general items were considered to be non-sensitive unrelated and all health and wellbeing items were considered to be non-sensitive related items (Fynn, 2013; Shaik, 2013).

After providing insight in terms of the format and statistical procedures conducted, this research will now provide an overview of the results obtained in an attempt to shed some light in terms of the achievements and the limitations of the norming study with regards to the overall aim of the study (Fynn, 2013; Shaik, 2013). The 2013 norming study achieved the following:

- 127 items for use in the modes of survey based on factor loadings
- Two categories; sensitive and non-sensitive
- 36 sensitive items
- 91 non-sensitive items
- Non-sensitive category was able to be divided into related and unrelated items for use in the UCT Type II
- 20 sensitive items were extracted for use in the modes of survey, 15 were left out on the basis of repetition

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<sup>1</sup> See data analysis section for more information (section 4.5)

- 20 non-sensitive related and non-sensitive unrelated items were extracted for use in the modes of survey

With the above achievements came a few limitations, such as not enough items for use in the modes of survey, especially with regards to the UCT Type II.

To elaborate, for credibility purposes items with factor loadings of .4 and above were only selected for use in the study. Anything below had to be discarded. Items such as “felt ready the first time I had sex,” “know where to buy condoms”, “am comfortable receiving gifts from my sexual partner”, “am concerned about contracting a sexually transmitted disease”, “am comfortable with casual sex,” “first had sex between the ages of 14 and 18” and “have engaged in heavy petting (including genital contact” to name a few featured below the .4 in terms of correlating highly with sensitivity and non-sensitivity, thereby limiting our options for UCT type II and the overall modes of survey (Fynn, 2013; Shaik, 2013) (See Appendix 2).

Apart from the achievements and limitations some interesting findings were also present in the norming study in terms of the sensitivity category. Such as the item “Often have had sex with my boyfriend/girlfriend because I feel that I have to,” which has previously featured in studies (Joubert, 2011, Shaik, 2012) on coercive sex and considered to be sensitive did not feature in the list of sensitive items due to having a factor loading of below .4.

The top five sensitive items for the student population were:

1. “Have had sex with someone when I was so drunk that I do not remember it” (.773)
2. “Have forced someone to have sex with me” (.772)
3. “Have had sexual intercourse when so under the influence of alcohol that I was unable to consent” (.761)
4. “Have engaged in sexual intercourse while under the influence of alcohol that I later regretted” (.746)
5. “Have tried to get someone else intoxicated in the hopes of having sexual intercourse with them” (.745)

Some items had the same factor loadings, such as (See table 3):

<i>Table 3: Norming Items with shared factor loadings (2013)</i>
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Factor loading	Item
.693	<p>“Have been in a sexual relationship for goods (e.g. cell phone, fashionable clothes”</p> <p>“Have been in a sexual relationship in exchange for things I need (e.g. food transport, accommodation, fees)</p>
.651	<p>“Have raped someone together with one or more of my friends”</p> <p>“Have had sex with a teacher or lecturer”</p>
.640	<p>“Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me”</p> <p>“Have had sex with someone who was in an authority position in relation to me”</p>
.462	<p>“Have had more than one sexual partner in the last month”</p> <p>“Have been pressurised to have sex without a condom”</p>

The top five *least sensitive* items for the population in ascending order were:

1. “Use the contraceptive pill” (.435)
2. “Only use condoms with a new partner” (.445)
3. “Have had more than one sexual partner in the last month” and “Have been pressurised to have sex without a condom” (.462)
4. “Had sex the first time when I did not really feel like doing it” (.465)
5. “Had sex when I was younger than 14” (.466)

What is also interesting is that the items dealing with behaviours which are deemed stigmatizing and can pose serious health risks for those involved, such as “Had unprotected sex whilst knowing I am HIV positive and/or have a sexually transmitted infection” (.702) featured in the top 10 sensitive behaviours but was considered less sensitive than having sex drunk or having unprotected sex (Fynn, 2013; Shaik, 2013). This in itself is a clear indication of how important it is for researchers to know what is *sensitive* when researching sensitivity, as it becomes difficult to explain disclosure rates obtained in terms of their association to sensitivity or some other variable which may have been overlooked.

While the study produced some interesting findings in terms of the results reviewed above, many participants complained about the length and format of the questionnaire, in terms of the question posed (Fynn, 2013; Shaik, 2013).

Many found the scale to be contradictory to the question for the following reasons:

- The question asks the participants; *if the item were true for them* they would *not* want anyone to know about it, but
- The scale provides response options such as “*true for me*” and “*not true for me*” with in between response options such as “*partially true for me*” and “*partially not true for me*”

Apart from the overall feedback obtained in the field when handing out and collecting questionnaires the main problem experienced as stated above was in terms of generating a sufficient amount of items for use in the UCT Type II (Fynn, 2013; Shaik, 2013).

Therefore the question used in the 2013 norming study was piloted along with a range of other questions to ensure that this norming study is able to deal with and eliminate confusion and to produce a range of items that can be used with confidence, in terms of their sensitivity ratings, in the survey modes mentioned above.

## 2.4 Pilot Study

### 2.4.1 Structure of the Pilot Study

The pilot study was conducted by Honours students Kikia and Phillips (2014) and was designed to inform the norming study. The design of the pilot study (See Appendix 3) had to facilitate the following two objectives:

1. To discover which question format would be best suited when attempting to norm and scale a range of sensitive behaviours among the student population. This included the question posed in the 2013 norming study.
2. To determine which social desirability scale was most efficient for use in future studies with this student population.

This pilot study attempted to achieve the above mentioned objectives by making use of the following:

- Criterion questions (questions with direct response options)
- Norming questions (questions with indirect response options)
- Two Short form social desirability scales

#### *Criterion Questions and Norming Options*

There were two criterion questions included in the pilot questionnaire. Criterion questions are questions which utilised a direct response format with only two response options (See tables below). The use of these criterion questions was based on the suggestion that it is sometimes difficult for participants to offer direct responses to items related to their actions (Hays, Hayashi, & Stewart, 1989). These criterion questions were necessary in order to validate the norming questionnaire and to validate the social desirability scale. The inclusion of these criterion questions was necessary in order to achieve a direct link between sensitivity and the norming option. The norming options were standardized and utilised a Likert scale with four response options.

The format of the Criterion questions and the norming options can be viewed below:

**Table 4: Pilot Study - Criterion questions**

Number:	Criterion:	Choice 1:	Choice 2:
1	These items are (for me):	Sensitive	Non- Sensitive
2	These items are true (for me):	True	False

**Table 5: Pilot Study - Norming options**

Number	Type of Questionnaire	Choice 1	Choice 2	Choice 3	Choice 4
1	I regard the following as so sensitive that if it were true about me, I would not want anyone to know about it	Strongly Agree	Agree	Disagree	Strongly Disagree
2	I would not want anyone to know the following about me, because it is so sensitive	Strongly Agree	Agree	Disagree	Strongly Disagree
3	I regard the following as sensitive information that one should not disclose to anyone.	Strongly Agree	Agree	Disagree	Strongly Disagree
4	I regard the following as sensitive information that one should not disclose to researchers.	Strongly Agree	Agree	Disagree	Strongly Disagree

5	I regard the following as non-sensitive in that I would be willing to disclose this information to anyone	Strongly Agree	Agree	Disagree	Strongly Disagree
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### ***Criterion Option 1***

Criterion option 1 included the following options, namely the one with response options “sensitive” and “non-sensitive” was used to validate the 2013 study and its findings and/or provide insight into how best to phrase the question of “*what is sensitive?*” among the student population, thereby achieving the objective of norming and scaling sensitivity. The pilot study questionnaire also contained a criterion question to validate the efficiency of the social desirability scales utilised (Kikia & Phillip, 2014). This criterion question had the following response options, “true for me” and “false for me.”

The first of the norming questions was used in the 2013 study, the other four questions are phrased differently for purposes of being able to establish the boundaries of disclosure in terms of sensitive information whilst being able to establish if the students are willing to disclose sensitive information about themselves and to whom (Kikia & Phillip, 2014).

This was important as previously (2013 norming study), sensitivity was personalised (true about me) which resulted in many problems, so now it is hoped that by generalising sensitivity (the following is so sensitive) and including the criterion question (sensitive/ non-sensitive) we may be able to either validate the previous norming study, or inform this current study on how best to ask the student population the question of *what is sensitive* for them.

The pilot study also attempted to use theoretical validation, which will also be used in this current study. People are sometimes reluctant to disclose information which is deemed socially inappropriate (Droitcour et al., 1991). This implies that people are prone to upholding the norms held by society. So if participants explicitly state that a behaviour is sensitive, then disclosure rates should be low for the behaviour in question. However if the behaviour is not sensitive then the behaviour could be disclosed openly (Droitcour et al., 1991). This type of theoretical validation further motivated for the use of the first Criterion question aimed at validating the norming options.

### ***Criterion Option 2***

The second Criterion question which was aimed at validating the social desirability scales, made use of the following theoretical validation, those who regard behaviours as sensitive

and who do not wish to disclose the behaviour to anyone should then score high in terms of social desirability in an attempt to portray themselves in a favourable light (Hays et al. 1989). Therefore if students regard the item as sensitive then theoretically it is believed that such behaviours have consequences attached to them and therefore individuals are unwilling to admit to such behaviours so they should respond by saying “false” to the item and then score high on the social desirability scale (Kikia & Phillips, 2014).

While this theoretical validation may prove useful in explaining the results obtained, the pilot study and the current norming study will be heavily reliant on the statistical results obtained.

### ***Social Desirability Scales***

The pilot study also compared the two shortened versions of the Crowne and Marlowe (1960) scale, namely the Hays et al., five item (1989) scale and the Reynolds (1982) thirteen item social desirability scale in an attempt to determine which of the scales is best suited for use in the norming study as a measure of social desirability. The comparison of the scales will be discussed below (Section 2.4.2).

<b><i>No.</i></b>	<b><i>Item</i></b>	<b><i>Scales</i></b>	
		<b><i>Hays</i></b>	<b><i>Reynolds</i></b>
<b>1.</b>	I sometimes feel resentful when I don't get my way.	√	√
<b>2.</b>	On a few occasions, I have given up doing something because I thought too little of my ability.		√
<b>3.</b>	There have been times when I felt like rebelling against people in authority even though I knew they were right.		√
<b>4.</b>	No matter who I'm talking to, I'm always a good listener.	√	√
<b>5.</b>	I can remember “playing sick” to get out of something.		√
<b>6.</b>	There have been occasions when I took advantage of someone.	√	√
<b>7.</b>	I'm always willing to admit it when I make a mistake.		√
<b>8.</b>	I sometimes try to get even rather than forgive and forget.	√	√
<b>9.</b>	I am always courteous (polite), even to people who are disagreeable (unpleasant).	√	√
<b>10.</b>	I have never been irked (irritated) when people expressed ideas		√

	very different from my own.		
11.	There have times when I was quite jealous of the good fortune of others.		√
12.	I am sometimes irritated by people who ask favours of me.		√
13.	I have never deliberately said something that hurt someone's feelings.		√

### ***Behaviours***

The following 15 behaviours which were considered as sensitive by various researchers (Chaudhuri & Christofides, 2007; Coutts & Jann, 2009; Dalton et al., 1994; Gregson et al., 2004; LaBrie & Earleywine, 2000; Langhaug, et al., 2010; Van der Elst, et al., 2009) were used in the pilot study:

*# - indicates behaviours considered to be Sensitive by researchers*

### ***Questions***

***#1. Have had more than one sexual partner in the last month***

2. Use the contraceptive pill

***#3. Have had sexual intercourse with someone who was too intoxicated to give consent***

***#4. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)***

5. Have gone to the local clinic when sick

6. Am comfortable with my sexual desires

***#7. Have raped someone***

8. Am HIV positive

9. Have engaged in light petting (kissing, fondling)

***#10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection***

11. Have used a condom the last time I had sex

12. Know how to prevent pregnancy

13. Have been drunk on more than one occasion

14. Look after my body

15. Sometimes drink alcohol socially



### 2.4.2 Results of the Pilot Study

Through analysing the frequencies obtained, correlation analysis (norming options), ANOVA and reliability statistics (social desirability scales), it was found that participants found only the following four behaviours to be sensitive:

#3. Have had sexual intercourse with someone who was too intoxicated to give consent.

#4. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)

#7. Have raped someone

#10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection

Based on the responses obtained for Criterion 2, “These items are true (for me)” utilizing a binomial scale with options “(True) (False),” it was established that disclosure rates for each of these five behaviours was fairly low (See Appendix3).

In terms of frequencies for the norming options utilised in the pilot study (See Appendix 3), the majority of participants chose options in the negative direction, which is “strongly disagree and disagree,” thereby implying that regardless of the behaviour being considered as sensitive, participants did not feel that the behaviour need *not* be disclosed, thus implying that it was ok to disclose the behaviour in question (Phillips & Kikia).

From the correlation analysis conducted, it was found that criterion 1 correlated more with option 2 of the norming questions. Since the aim of this study is to norm and scale sensitivity, the option with the most correlations between the sensitive options is regarded as the best option. Option 2 (“I would not want anyone to know the following about me, because it is so sensitive”) had a total of 28 correlations of which 7 were correlations between the sensitive behaviours. Based on the correlations below, the pilot study has found option 2 as the best questionnaire wording for norming and scaling sensitivity amongst the student population (See Appendix 3).

The reliability statistic (Cronbach’s alpha), for the Hays 5 item social desirability scale was .599 as can be seen above, a satisfactory alpha would be in the range of .7 or higher. However taking into consideration the small size of the scale an alpha of .599 may be deemed acceptable especially considering the ANOVA conducted was significant with a significance

level of 0.00 ( $p = 0.00$ ) which is lower than alpha of 0.05 (See Appendix 3). This indicates that there is a difference in social desirability bias between the participants.

On the other hand, Cronbachs alpha for the Reynolds 13 item scale was significantly higher (.664) than that of the Hays 5 item scale and closer to the .7 range. Like the Hays scale, the Reynolds scale also produced significant findings for ANOVA with a  $p = 0.00$  and intra class correlations were also 0.00. Both scales had significant differences present in terms of the sample (See Appendix 3).

The mean however, for Reynolds 13 item social desirability scale was also higher, with a mean of 17.99, therefore based on the mean and the reliability statistic of the Reynolds scale being higher than that of the Hays scale, the Reynolds 13 item scale was considered to be the most efficient of the two scales in terms of assessing social desirability bias. Whilst the Reynolds scale has more items and the higher scores may be attributed to its size, the frequencies in terms of obtaining disclosure rates of favourable characteristics for the common questions between the scales indicated that the Reynolds 13 item scale was better. Therefore this decision is based on the frequencies obtained, the mean, Cronbachs alpha and the significance obtained in the ANOVA conducted.

### **2.4.3 Overview of the Pilot Study Results**

According to the theoretical validation, behaviours considered as sensitive should have low disclosure rates. People who wish to portray themselves in a favourable light should not disclose such information about themselves as these behaviours may have consequences attached to them (Droitcour et al., 1991).

Therefore frequencies were analysed as a means of making a comparison between theory and the findings. The statistical findings in terms of the analyses conducted depict these theoretical beliefs. Disclosure rates for all the behaviours considered as sensitive for the participants were fairly low when assessed in accordance with Criterion 2 (true/false) that is asking participants to directly disclose their involvement in the behaviour.

One confounding factor is that though participants regard the behaviour as sensitive, they do not feel that the behaviour should *not* be disclosed. This may be due to various factors, such as participant's exposure to these behaviours, familiarity with the items or the studies using these items and/ or some bias or other factors not taken into consideration.

In terms of social desirability bias, participants mostly responded positively to the social desirability items, thus indicating that these participants are prone to social desirability bias, this is further supported when considering the low disclosure rates for the sensitive behaviours.

### ***Limitations of the pilot study***

Based on these findings it is considered necessary to include the criterion in the norming study. Since it is unclear why participants responded to the norming options as such, further research is required, in order to determine if respondents would do the same for the other behaviours previously used or if this is only the case for these behaviours and this sample. A larger study, with more participants and more *sensitive* and *non-sensitive* behaviours may be beneficial. Therefore the norming study has utilised the preferred norming option and scale along with both criterion options as a means of directly and indirectly norming and scaling a wider range of sensitive and non-sensitive behaviours for use by other researchers in Masters and PhD studies.

The Criterion options were repeated in case participants found it difficult to utilise direct response options in terms of the behaviours in question and as a means of validating the results obtained from this study.

## Chapter 3 – Rationale and Aim

### 3.1 Rationale

Ong and Weiss (2000) have reviewed two assumptions with regards to validating responses to sensitive questions. The *first* being that dishonesty in responses is *predictable* and the belief that *greater reports* of behaviours which are regarded as *stigmatising* indicate that responses obtained are most likely to be *accurate*.

This enables a researcher to conclude with some sense of confidence in terms of the efficiency of one method over another depending on which enables more reports of stigmatising behaviours (Ong & Weiss, 2000).

The rationale for this study lies with the *second* assumption, to validate self-reports based on an assumption that the researcher has *knowledge* of which behaviours are regarded as *stigmatising* and thus based on this, a researcher may utilise question sensitivity as an essential factor (Ong & Weiss, The impact of anonymity on responses to "sensitive" questions, 2000). However this would then imply that not only does the researcher know *what is sensitive* to the participants, but that the *participants* are in *agreement* with the researcher (Dickson-Swift et al., 2008).

Therefore this research set out to find out “*what is sensitive?*” by presenting a range of behaviours to the student population which can be categorised as either sensitive or non-sensitive. This is important as it addresses the question of whether the behaviours previously researched at UKZN amongst the student population are in fact sensitive or non-sensitive behaviours, and if they are sensitive, would the students disclose these behaviours to others. This study builds on the 2013 norming study and attempts to address the issues presented in the 2013 norming study.

### 3.2 Aims

In an attempt to find out what is sensitive for the student population, this research had the following aims:

1. To norm and scale a range of sensitive and non-sensitive behaviours among the student population at UKZN (Pmb campus) using direct (criterion options) and indirect (norming) response options
2. To assess if the student population would disclose information about themselves which they regard, and have indicated as sensitive for them

3. To measure social desirability bias

### 3.3 Research Questions

Based on these aims this research attempted to answer the following questions:

1. Which behaviours are considered sensitive and non-sensitive for the student population?
2. Does sensitivity affect disclosure?
3. Are these findings affected by social desirability bias?

### 3.4 Hypotheses

This research attempted to test the following hypotheses between each of the questions posed:

H<sub>0</sub>: There is no significant difference between perceptions of sensitivity and disclosure

H<sub>1</sub>: There is a significant difference between perceptions of sensitivity and disclosure

*Table 7: Pairwise hypotheses*

Comparison	H <sub>0</sub>	H <sub>1</sub>
Per of Sensitivity/disclosure	H0: $\mu$ Per of Sensitivity = $\mu$ Disclosure	H1: $\mu$ Per of Sensitivity $\neq$ $\mu$ Disclosure

## Chapter 4- Methodology

The methodology below discusses other studies which informed the design of this study. In order to assist and/or remind the reader the studies will be explained hereunder:

**2013 norming study** – previous norming study conducted at UKZN Pietermaritzburg campus (Fynn, 2013; Shaik, 2013).

**Pilot Study** – The 2014 pilot study which informed the design of this study (Kikia & Phillip, 2014).

**Criterion questions** – question posed using direct response options (sensitive/non-sensitive and true/ false) used for validating the responses obtained from the norming option in the pilot study and this research.

**Norming option** – question posed using Likert scale response options (strongly agree/agree/strongly disagree/disagree) as a means of norming and scaling sensitivity.

## 4.1 Research Design

A quantitative cross sectional between subjects' survey research design was used in this study. Paper and pencil rating sheets which utilised Likert scales were used for this study.

This study made use of the criterion questions and the norming question empirically determined as most efficient in the pilot study (Kikia & Phillip, 2014). This study also included the social desirability scale which was approved by the pilot study as mentioned and reviewed previously (See section 2.4).

This replication of the pilot study was done in order to directly (sensitivity criterion option) and indirectly (norming option) norm and scale a wider range of behaviours researched at UKZN in terms of sensitivity and disclosure. These behaviours were previously considered to be sensitive and this current norming study was carried out in order to verify the sensitivity of these behaviours. The results of this study will inform future Masters and PhD studies at the university and may be able to highlight the difficulty of making assumptions about sensitivity which may render survey data on sensitive behaviours questionable. This study also tested a variation of the design utilised in the 2013 norming study, by:

- Conducting a pilot study to ensure the question used was understood by the students in order to limit confusion
- Providing a worked example of what should be done after every twenty behavioural items
- Including the response options in the Likert scale instead of using numbers, along with each behaviour to limit confusion

## **4.2 Recruitment - Norming Study**

For purposes of representation this study attempted to access a large number of students across the University. The paper and pencil format of the study enabled researchers to access students from all parts of the UKZN Pietermaritzburg campus, including all sections of the campus. Students were approached at lecture venues, libraries, pathways and on the lawn. This was done to ensure that the researcher accessed as many students as possible so that a consensus of opinion in terms of sensitivity may be reached through a sample of as many students as possible.

In keeping with this objective, this study made use of purposive sampling in order to access the sample of students at the University. This sampling method was applicable to this research as the focus of this research was on the UKZN students (purposive). All students aged 18 and older were encouraged to participate. There were no limitations in terms of gender, year of study or race. Data collection took place from July 2015 to October 2015. The norming study consisted of a sample of 314. The student samples consisted of male and female students between the ages of 18-24 and were from all race and religious groups. The sample will be discussed in detail in the results.

## **4.3 Informed Consent**

In keeping with ethical standards, researchers explained to and provided participants with an information sheet and a consent form which was signed by the participant and returned to the researcher (See Appendix 4 and 5). The research purpose, process and the participants' rights were explained to the participant both in the information sheet and verbally. This involved explaining the following vital points to the participants:

- That their participation is 100% voluntary
- That their responses are 100% confidential
- That this research does not involve any form of deception
- That they may withdraw at any time with no consequences and they would still be entitled to an incentive
- That they may choose not to respond to questions that make them uncomfortable in any way

Participants were also told that they may be referred for counselling to their nearest campus based counselling centre should they feel the need to be counselled. In doing so autonomy was maintained as researchers were honest with the participants, and participants fully

understood the aims and objectives of the study. Justice was also maintained as participants were treated fairly and no form of deception was used in this research. Beneficence was also maintained as no personal information was obtained from the participant; the consent form only required a date and a signature. The questionnaires only required the participants' age, gender, race and year of study and none of this information could be used to identify any of the participants as names and student numbers were not required (See Appendix 6).

Participation was incentivised in the form of a raffle. The raffle prize was varying amounts of cash ranging from R20 to R100. Participants were informed that the draw would take place once the study was completed. In an attempt to maintain autonomy and beneficence and still compensate participants through the raffle, participants only had to provide an email address on a piece of paper and slot it into a shoe box.

To ensure non-maleficence participants were referred to student counselling services either at the College Counselling Service or The Child and Family Centre in instances where the study might have caused distress or harm due to the items being used in the study with are based on items considered to be sensitive in the domains of risky behaviours (See Appendix 7).

The research at the end of the study will be kept for 5 years by my supervisor Mr. Vernon Solomon and the University. The data will be stored for further analysis along with the data from the set of related studies as part of an ongoing PhD research conducted by the supervisor, after which it will be stored by the supervisor in a password protected folder. The study received HSSREC approval (HSS/0040/015M– see Appendix 8) and Gatekeeper approval (See appendix 9).

#### **4.4 Data Collection**

The surveys designed for data collection required the following demographic information, participants' age, gender, year of study, race, religion and religious commitment. This information was required on each questionnaire for research (religion and religious commitment) and demographical purposes (age, gender, year of study, race).

The norming study utilised a total of 186 sensitive and non-sensitive behaviours. This norming study was also able to test a design issue in terms of the 2013 norming study, by making significant changes to this study. Such as:

- Including a worked example after every 20 questions
- Utilizing a pilot study to test the question posed



- Including the response options in the response boxes instead of using numbers as response options

The limitations of the 2013 norming study were:

- 1) The study was lengthy
- 2) The study did not include the response options that were convenient for the participants
- 3) The question was also deemed confusing

All these factors were considered when designing this study in order to achieve the desired goal of this study, which was to norm and scale sensitivity across the student population.

The items used in this study were also used in the 2013 norming study conducted by Fynn and Shaik (2013) and were derived from a review of literature, (South African risk studies, and local studies, as well as historical research conducted by Dalton et al. (1994) in his study, ‘Using the unmatched count technique (UCT) to estimate base rates for sensitive behavior, ’ Dunkle, K.L., Jewkes, R., Nduna et al. (2004) in their study ‘Transactional sex with casual and main partners among young South African men in the rural Eastern Cape: Prevalence, predictors and associations with gender-based violence’ and LaBrie and Earleywine, (2000) in their study ‘Sexual risk behaviours and alcohol: Higher base rates revealed using the unmatched-count technique,’) to name a few.

These items are related to the behaviours of interest at UKZN. Hereunder are the *sensitive* items which were normed and scaled in this study along with a range of other non-sensitive items:

“I regret having had sex”

“I have had sex with a teacher or lecturer,”

“I have had more than two sexual partners in the last three months,”

“I have had sex with a partner who was 10 or more years older than me at the time,”

I am HIV positive”

”I have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, genital herpes, genital ulcer, idrop),”

“I have had unprotected sex whilst knowing I am HIV positive and/or have a sexually transmitted infection”

“I have refused to use a condom,”

” I have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes)

“I have had sex with someone who wasn’t a regular partner because I’ve needed material things (e.g. rent, food, cosmetics)”

“I have been forced to have sex”

“I have forced someone to have sex with me,”

“I have had to slap, kick or bite someone to stop them from having sex with me, “

“I have raped someone,”

“I have raped someone together with one or more of my friends,”

“I have engaged in sexual intercourse whilst under the influence of alcohol that I later regretted,”

“I have had sex with someone when I was so drunk that I do not remember it,”

“I have had sexual intercourse when so under the influence of alcohol that I was unable to consent”

“I have had sexual intercourse without a condom being used whilst I was under the influence of alcohol”

“I have tried to get someone else intoxicated in the hopes of having sexual intercourse with them)”

This norming study also utilised the Reynolds thirteen item social desirability scale which was empirically determined as most efficient by the pilot study in an attempt to minimise the effects of social desirability bias.

#### 4.5 Data Analysis

The data from this study was analysed using IBM SPSS™ Version 23, statistical software as it was economical and contained the necessary statistical functions for analysis of the data obtained. A summary of the analyses performed for this study can be seen in the table below.

*Table 8: Summary of Data analysis*

<i>Question</i>	<i>Method of data entry</i>	<i>Data analysis</i>
Criterion 1 (sensitive/ non-sensitive)	Counts obtained by tallying responses	Counts, mean scores, standard deviations and reliability coefficients
Criterion 2	Counts obtained by tallying responses	Counts, mean scores,

(True/ False)		standard deviations and reliability coefficients
Norming Option	Extreme scores combined in order to produce dichotomous data (agree/ disagree)for comparison with Criterion question, factor loadings obtained with Likert scale items	Factor analysis, Counts mean scores, standard deviations and reliability coefficients
Social Desirability Scale	Extreme scores combined in order to produce dichotomous data (agree/ disagree) for comparison with Criterion question	Counts, mean scores, standard deviations and reliability coefficients

In order to achieve the aims of this study, perceptions on sensitivity and disclosure were analysed by tallying the responses obtained using the Count option on SPSS. This was done as perceptions of sensitivity and disclosure made use of direct response options, therefore participants were explicitly indicating if the behaviour in question was sensitive or not and/or if the behaviour was true or false for them. In order to ensure that the correct conclusions were drawn, any behaviour with a 40% endorsement or more (126 counts or more) was regarded as an indication of sensitivity and/or disclosure of the behaviour in question. This endorsement was heavily influenced by the data obtained. Mean scores, standard deviations and reliability coefficients were also carried out as a means of assessing the two response options.

In terms of the norming option, factor analysis was carried out using principal components analysis. Since the aim of this study was to norm and scale sensitivity, it was essential to ensure that the question posed was able to measure sensitivity and that any other factors present be brought to light (Lorenzo-Seva, 2013). Items that correlated .4 or higher were regarded as sensitive. The .4 factor loading was chosen as it represents the bulk of the data and was in keeping with the factor loadings previously chosen in the 2013 norming study. Since there is no known literature in terms of norming and scaling sensitivity, the data had to be analysed in a way that insured a comparison between the 2013 study (Fynn, 2013; Shaik, 2013) and the criterion options. To enable a comparative analysis between the direct response options, namely sensitivity and disclosure, the responses of the norming option were dichotomised by combining the two extremes (Hays, Hayashi, & Stewart, 1989). This provided agree and disagree response formats which were tallied and compared to the direct

response options and as a means of ensuring the results were able to be accurately compared by eliminating wrongful classifications.

The social desirability scale utilised in the norming study, was analysed by calculating a reliability coefficient. Cronbachs alpha, which was calculated as part of establishing the reliability of the scale utilised. Mean scores were then calculated and the two extreme scores of the data was dichotomised in order to achieve a social desirability score. This enabled or possibly eliminated wrongful classifications, in terms of obtaining marginal classifications for social desirability (Hays et al, 1989).

## Chapter 5 –Results

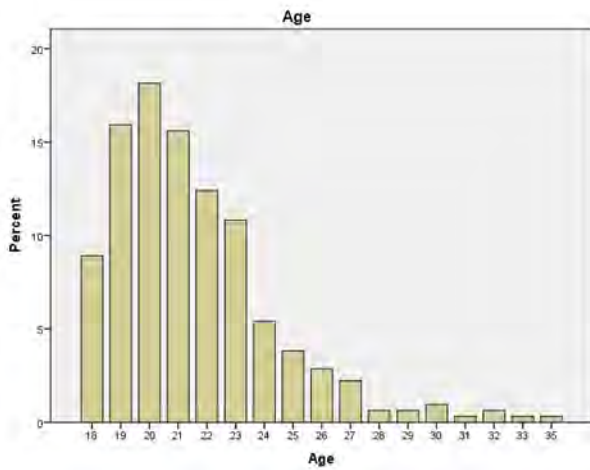
### 5.1 Sample Characteristics

378 participants were recruited for the 2015 norming study, of which 314 surveys were analysed. 64 had to be discarded due to being incomplete. This sample (314 participants) was adequate as the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .872, which is statistically regarded as sufficient.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.872
Bartlett's Test of Sphericity	Approx. Chi-Square	56331.171
	df	17205
	Sig.	.000

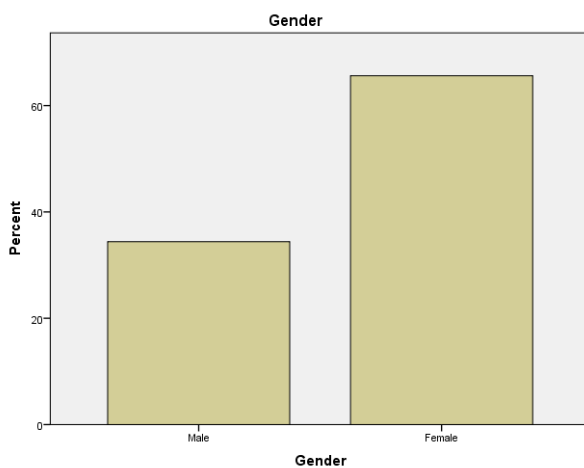
Participants recruited for this study were between the ages of 18 and 35, with majority of the participants being in the ages of 19 -23 (See figure 3 below).

*Figure 3 – Age distribution*

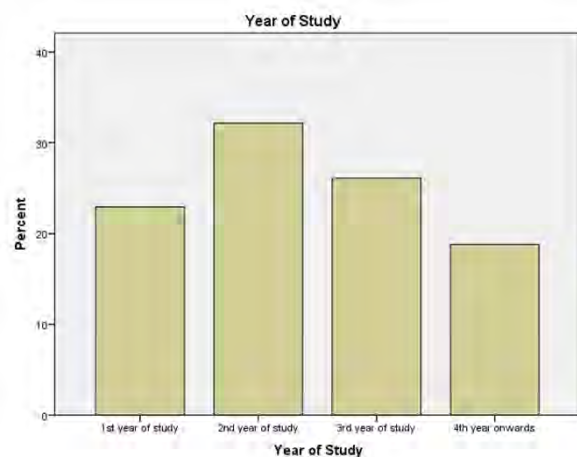


More females than males (See figure 4 below) participated in this study and a large amount of participants were in their first 3 years of study at UKZN (Pmb) (See figure 5 below).

**Figure 4 – Gender distribution**

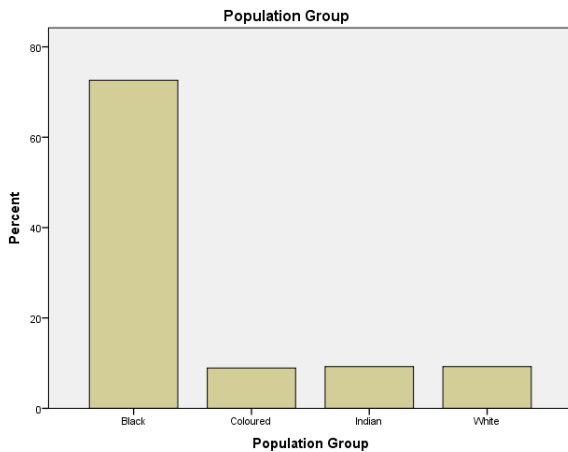


**Figure 5 – Year of study**



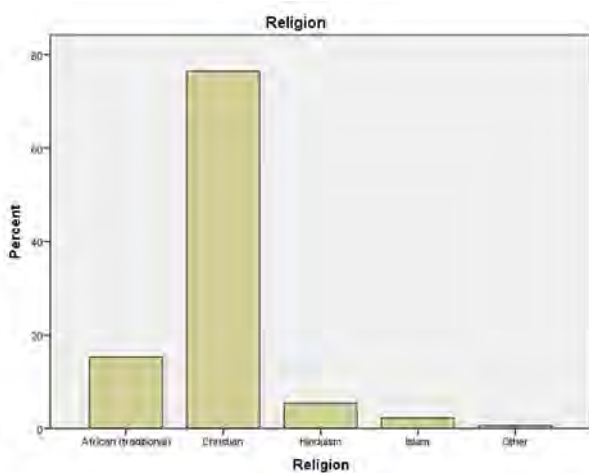
Participants were mostly from the Black population group, however the study was able to recruit a fair amount of Indian, coloured and white participants, with a small amount of participants opting not to disclose their population group (See figure 6 below).

**Figure 6 – Population group**

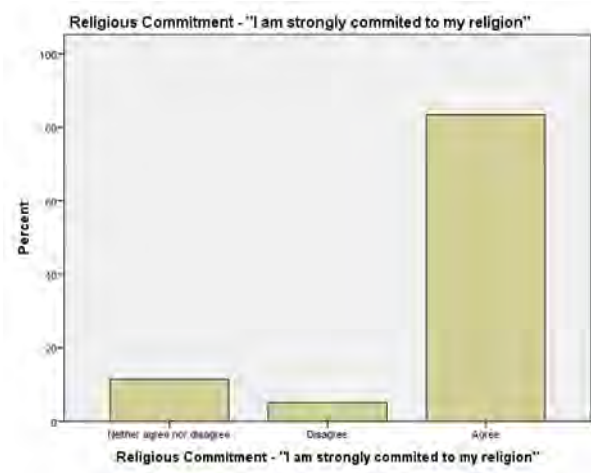


Majority of the participants believed in the Christian faith, with most participants indicating that they were strongly committed to their religions, as can be seen in the graphical representations below (Figure 7 & 8).

*Figure 7 – Religious groups*



*Figure 8 – Religious commitment*



## 5.2 Norming Study

Percentages were obtained for the two direct response options utilised in the study, namely sensitivity and disclosure; these were compared to the percentages obtained from the norming option. Factor loadings were also provided for the norming option as a means of directly

comparing the sensitivity rates obtained to that of the 2013 norming study. A table with the complete percentages and factor loadings for all 186 behaviours can be seen in the appendix section (See appendix 10). (For the behaviours chosen as sensitive, see table 10 below).

**Table 10: Current Norming Study - Percentages and Factor Loadings**

<b>Behaviour</b>	<b>Sensitivity</b>	<b>Disclosure</b>	<b>Norming Option</b>
1. Have been/ am in a sexual relationship in exchange for things I need (e.g. food, transport, accommodation, fees).	<b>41.3%</b>	<b>13.7%</b>	<b>66.9% (.521)</b>
2. Have had sexual intercourse with someone who was too intoxicated to give consent.	<b>45.1%</b>	<b>17.1%</b>	<b>35.4% (.607)</b>
3. Often have had sex with my boyfriend/girlfriend because I feel that I have to	<b>51%</b>	<b>39.4%</b>	<b>45.9% (.448)</b>
4. Have raped someone	<b>39%</b>	<b>5.4%</b>	<b>22.9% (.541)</b>
5. Am comfortable with my sexual desires	<b>46%</b>	<b>71.4%</b>	<b>48.1% (.167)</b>
6. Am HIV positive	<b>47%</b>	<b>9.5%</b>	<b>35.7% (.608)</b>
7. Am concerned about contracting a sexually transmitted disease	<b>40.3%</b>	<b>73.7%</b>	<b>43.6% (.058)</b>
8. Have taken illegal drugs	<b>36.5%</b>	<b>29.8%</b>	<b>34.1% (.428)</b>
9. Have engaged in heavy petting (including genital contact)	<b>51.4%</b>	<b>59%</b>	<b>49.4% (.377)</b>
10. Know about the "morning after" pill	<b>31.1%</b>	<b>76.2%</b>	<b>40.1% (.029)</b>
11. Have used a condom the last time I had sex	<b>46.3%</b>	<b>57.1%</b>	<b>44.6% (.256)</b>
12. Have had more than one sexual partner in the last month	<b>47%</b>	<b>19.4%</b>	<b>41.7% (.526)</b>
13. Have raped someone together with one or more of my friends	<b>36.2%</b>	<b>5.4%</b>	<b>30.3% (.546)</b>
14. Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).	<b>39.7%</b>	<b>8.9%</b>	<b>29.9% (.577)</b>
15. Regret the first time I had sex	<b>48.9%</b>	<b>41.6%</b>	<b>48.4% (.309)</b>
16. Have experimented casually with various drugs	<b>30.8%</b>	<b>21.6%</b>	<b>28.7% (.430)</b>
17. Have had sex with a partner who was 10 or more years older than me at the time	<b>36.5%</b>	<b>14.6%</b>	<b>31.8% (.553)</b>
18. First had sex between the ages of 14 and 16	<b>40.6%</b>	<b>25.4%</b>	<b>35% (.501)</b>
19. Had sex when I was emotionally ready	<b>45.1%</b>	<b>49.2%</b>	<b>42% (.385)</b>
20. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	<b>42.2%</b>	<b>14.3%</b>	<b>37.3% (.621)</b>
21. Have taken drugs intravenously (injectable)	<b>26.3%</b>	<b>8.9%</b>	<b>23.2% (.422)</b>
22. Have had sex with someone who wasn't my regular partner	<b>43.2%</b>	<b>42.5%</b>	<b>43.3% (.511)</b>
23. Am at risk for HIV	<b>39.7%</b>	<b>29.5%</b>	<b>40.4% (.435)</b>
24. Had sex when I was younger than 14	<b>39.4%</b>	<b>11.7%</b>	<b>28.3% (.556)</b>
25. Have had more than two sexual partners in the last three months	<b>40.6%</b>	<b>19%</b>	<b>35% (.507)</b>
26. Have refused to use a condom	<b>41%</b>	<b>22.5%</b>	<b>35% (.480)</b>
27. Had sex the first time with someone when I did not really feel like doing it	<b>45.1%</b>	<b>27%</b>	<b>41.1% (.569)</b>
28. Have had sex with someone who isn't a regular partner because I've needed material things (e.g. rent, food, cosmetics).	<b>39.4%</b>	<b>9.2%</b>	<b>33.4% (.633)</b>
29. Have had to slap, kick or bite to stop someone having sex with me	<b>39.4%</b>	<b>18.4%</b>	<b>34.1% (.555)</b>

30. Have engaged in sexual intercourse while under the influence of alcohol that I later regretted.	<b>39.7%</b>	<b>18.4%</b>	<b>37.6% (.540)</b>
31. Regret having had sex	<b>43.2%</b>	<b>35.9%</b>	<b>42% (.507)</b>
32. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	<b>41.3%</b>	<b>8.3%</b>	<b>31.5% (.610)</b>
33. Have tried to get someone else intoxicated in the hopes of having sexual intercourse with them.	<b>37.5%</b>	<b>12.1%</b>	<b>29% (.587)</b>
34. Have been coerced or forced to have sexual intercourse by someone who was under the influence of alcohol.	<b>38.7%</b>	<b>13%</b>	<b>31.2% (.609)</b>
35. Have been pressurised to have sex without a condom	<b>39.4%</b>	<b>25.7%</b>	<b>33.8% (.482)</b>
36. Have forced someone to have sex with me	<b>29.2%</b>	<b>5.4%</b>	<b>21% (.506)</b>
37. Have had sexual intercourse when so under the influence of alcohol that I was unable to consent.	<b>39.4%</b>	<b>14.9%</b>	<b>36% (.667)</b>
38. Have had sex with a teacher or lecturer	<b>32.1%</b>	<b>6%</b>	<b>24.8% (.601)</b>
39. Have had sex with someone when I was so drunk that I do not remember it	<b>34.9%</b>	<b>14.3%</b>	<b>30.9% (.587)</b>
40. Have had sexual intercourse without a condom being used while under the influence of alcohol.	<b>37.5%</b>	<b>20.6%</b>	<b>35.4% (.562)</b>
41. Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).	<b>30.2%</b>	<b>10.8%</b>	<b>25.2% (.514)</b>
42. Felt ready when I had sex the first time	<b>43.8%</b>	<b>44.1%</b>	<b>38.9% (.400)</b>
43. Have had sex with someone who was in an authority position in relation to me	<b>29.8%</b>	<b>9.5%</b>	<b>28.7% (.553)</b>
44. Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.	<b>28.6%</b>	<b>6.7%</b>	<b>22% (.531)</b>

A total of 44 behaviours were identified as sensitive through this norming study either by having factor loadings of higher than .4 or due to having more than 40% consensus of opinion in terms of sensitivity. Most of the factor loadings were .4 and above and not higher than .7 as this would have indicated *redundancy*. These behaviours are deemed as risky sexual behaviours, behaviours which are frowned upon by society as well as behaviour which are regarded as incriminating in the eyes of the law, such as raping someone and indulging in substance abuse.

These behaviours have also been listed as sensitive in a norming study conducted in 2014 (Fynn & Shaik 2014), as well as in a range of other studies related to sensitivity (Dalton, Wimbush, & Daily, 1994; Labrie & Earleywine, 2000; Gregson, et al., 2004; Chaudhuri & Christofides, 2007; Coutts & Jann, 2008; Van der Elst, Okuku, Nakamya, Muhaari, & Davies, 2009; Langhaug, Sherr, & Cowan, 2010).

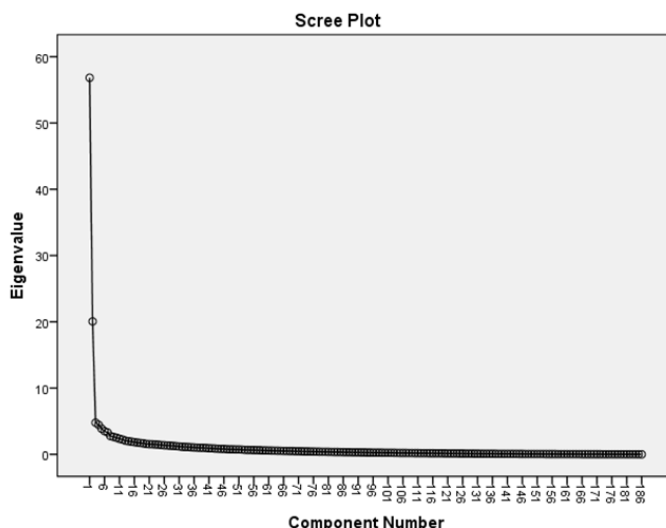


Disclosure rates for most of these behaviours were below 30% which can be considered as low, with the exception of the following behaviours, “Often have had sex with my boyfriend/girlfriend because I feel that I have to,” “Am comfortable with my sexual desires,” “Am concerned about contracting a sexually transmitted disease,” “Have engaged in heavy petting (including genital contact)” “Know about the "morning after" pill,” “Have used a condom the last time I had sex,” “Regret the first time I had sex,” “Had sex when I was emotionally ready,” “Have had sex with someone who wasn’t my regular partner,” “Regret having had sex,” “Felt ready when I had sex the first time” (See table 10)

Behaviours which involved sex in exchange for goods, coercion, and substance abuse, HIV or having sex with an authority figure had disclosure rates of less than 10% (See table 10). This may be an overall indication of the extreme sensitivity of the behaviour as these behaviours have serious consequences attached to them and may be harder to disclose

The factor analysis conducted for the norming option also produced a scree plot (See figure 7 below) which indicated that there were two factors which should be taken into consideration. This was also clearly visible in the component loadings table (See Appendix 10). All of the behaviours listed above were part of component 2 in the table. This was taken as an indication of behaviours being grouped as sensitive and non-sensitive by the student population, as component 2 had low disclosure rates for all the behaviours in its category.

**Figure 9 – Scree plot**



A measure of reliability was undertaken for the study which also produced satisfactory figures, ranging from .923 - .987 as can be seen below (Table 11). This indicates that the test had internal consistency and that the items were related as a group.

**Table 11: Norming Study - Reliability Statistics**

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Sensitivity	.987	.987	186
Norming Option	.986	.986	186
Disclosure	.917	.923	186

### 5.3 Social Desirability

A reliability coefficient was calculated for the social desirability scale. The coefficient was much lower than the .7 score (which would be an ideal indication of internal consistency). The scale obtained a score of .444 as can be seen below (Table 12).

**Table 12: Social Desirability - Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.444	.439	13

On closer inspection deleting the 13<sup>th</sup> item, “I have never deliberately said something that hurt someone’s feelings,” would result in an increase in the reliability coefficient considerably to .520 (See Appendix10). However, this increase is still much lower than the acceptable .7 figure which is regarded as favorable. There are no other items that could increase the overall coefficient, resulting in the impression that the scale itself has a low reliability score and may thus be problematic for the sample in question. This may be due to

the positioning of the scale in the questionnaire (right at the end of 186 items) or its inability to measure social desirability for the sample in question.

The dichotomizing of the two extreme scores led to the following percentages for each item:

**Table 11: Social Desirability Scale – Item percentages**

<i>Items</i>	<i>Agree</i>	<i>Disagree</i>
1. I sometimes feel resentful when I don't get my way.	58.9%	41.1%
2. On a few occasions, I have given up doing something because I thought too little of my ability.	58.3%	41.7%
3. There have been times when I felt like rebelling against people in authority even though I knew they were right.	50%	50%
4. No matter who I'm talking to, I'm always a good listener.	78%	22%
5. I can remember "playing sick" to get out of something.	69.4%	30.6%
6. There have been occasions when I took advantage of someone.	42.4%	57.6%
7. I'm always willing to admit it when I make a mistake.	60.2%	39.8%
8. I sometimes try to get even rather than forgive and forget.	54.8%	45.2%
9. I am always courteous (polite), even to people who are disagreeable (unpleasant).	65.9%	34.1%
10. I have never been irked (irritated) when people expressed ideas very different from my own.	53.5%	46.5%
11. There have times when I was quite jealous of the good fortune of others.	43%	57%
12. I am sometimes irritated by people who ask favours of me.	43.6%	56.4%
13. I have never deliberately said something that hurt someone's feelings.	63.4%	36.6%

According to Hays et al. (1986) participants would respond in a manner that portrays them in a favourable light. Based on this view 7 out of the 13 questions (53.8%) reflect socially desirable responding. These include, "No matter who I'm talking to, I'm always a good listener," "There have been occasions when I took advantage of someone," "I'm always willing to admit it when I make a mistake," "I am always courteous (polite), even to people who are disagreeable (unpleasant)," "I have never been irked (irritated) when people expressed ideas very different from my own," "There have times when I was quite jealous of the good fortune of others," "I have never deliberately said something that hurt someone's feelings." While this may be an indication of social desirability bias, it cannot be explicitly stated as such due to the lack of an adequate reliability coefficient for the scale. It is also

possible that the scale may produce adequate findings in a shorter study or one of a different nature.

## **Chapter 6 – Discussion**

### **6.1 Norming Study**

This norming study was able to norm a total of 44 behaviours as sensitive for the student population at the University. These behaviours were considered as sensitive due to being selected as such by 40% or more of the sample in the direct responding option, with the response options, “sensitive” and “non-sensitive” or by having factor loadings of .4 or greater. The direct response option contributed a total of 20 behaviours and the norming option contributed a total of 38 behaviours in the sensitivity category. Overall this study was able to include 24 more behaviours in the category of sensitive as compared to the 2013 norming study (Fynn, 2013; Shaik, 2013).

This study also had an advantage in using the direct response options which served as a direct indication of the perceptions of sensitivity held by the student population. It limited confusion in terms of having a constant reminder as to what was expected of the participants and it

enabled participants to directly rate the behaviours as sensitive (criterion option) even if they experienced problems with the norming option. However none were brought to the attention of the researchers.

These behaviours were also behaviours which were used in research conducted at UKZN namely, coercive sex (sex which may be considered as forced sex) (Joubert, 2011) , transactional sex (sex in exchange for goods) and coercive sex (Shaik, 2012), risky sexual practices and sex under intoxication (Fynn, 2013; Shaik, 2013) as well as research conducted by various other researchers, namely (Dalton, Wimbush, & Daily, 1994; Labrie & Earleywine, 2000; Gregson, et al., 2004; Chaudhuri & Christofides, 2007; Coutts & Jann, 2008; Van der Elst, Okuku, Nakamya, Muhaari, & Davies, 2009; Langhaug, Sherr, & Cowan, 2010).

The table below (table 12) indicates the behaviours with the highest factor loadings and/or percentages regarding the sensitivity of those behaviours which were highlighted as sensitive, which for the purposes of this study may be considered as most sensitive for the student population.

**Table 12: Current Norming Study – Sensitive behaviours**

<b>Factor Loadings</b>	<b>Percentages</b>	<b>2013 Norming Study</b>
1. Have had sexual intercourse when so under the influence of alcohol that I was unable to consent. (.667)	1. Have engaged in heavy petting (including genital contact) (51.4%)	“Have had sex with someone when I was so drunk that I do not remember it” (.773)
2. Have had sex with someone who isn’t a regular partner because I’ve needed material things (e.g. rent, food, cosmetics) (.633)	2. Regret the first time I had sex (48.9%)	“Have forced someone to have sex with me” (.772)
3. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop) (.621)	3. Am HIV positive & Have had more than one sexual partner in the last month (47%)	“Have had sexual intercourse when so under the influence of alcohol that I was unable to consent” (.761)
4. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection (.610)	4. Have used a condom the last time I had sex (46.3%)	“Have engaged in sexual intercourse while under the influence of alcohol that I later regretted” (.746)
5. Have been coerced or forced to	5. Am comfortable with my	“Have tried to get someone else

have sexual intercourse by someone who was under the influence of alcohol. (.609)	sexual desires (46%)	intoxicated in the hopes of having sexual intercourse with them” (.745)
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The 2013 norming study had higher factor loadings for the behaviours considered as most sensitive. This may be attributed to the fact that the 2013 norming study had a slightly larger sample size (360 participants), whereas the current norming study only had 314 participants. The difference could also be attributed to other factors not taken into consideration.

All the behaviours indicated as sensitive between the direct and indirect norming options differ. This may be due to the question posed by the norming option, which asks participants if the behaviour is so sensitive that it should not be disclosed, versus only asking if the behaviour is sensitive or not.

For the 2013 norming study, the behaviours are related to sex under intoxication and duress, the current study also flags similar behaviours, with the inclusion of behaviours related to sex in exchange for goods and unsafe sexual practices as can be seen above.

Behaviours such as rape, gang rape, sex with authority figures, drug and other transactional sex related behaviours are not featured in the top 5, some of these behaviours feature in the least sensitive category whereas these behaviours have always been treated as equally sensitive (See table 13 below). Why this may be the case requires further qualitative investigating.

**Table 13: Current Norming Study – least sensitive behaviours**

<b>Factor Loadings</b>	<b>Percentages</b>	<b>2013 Factor Loadings</b>
1. Know about the "morning after" pill (.029)	1. Have taken drugs intravenously (injectable) (26.3%)	“Use the contraceptive pill” (.435)
2. Am concerned about contracting a sexually transmitted disease (0.058)	2. Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me. (28.6%)	“Only use condoms with a new partner” (.445)
3. Am comfortable with my sexual desires(.167)	3. Have forced someone to have sex with me (29.2%)	“Have had more than one sexual partner in the last month” and “Have been presurised to have sex without a condom” (.462)

4. Have used a condom the last time I had sex (.256)	4. Have had sex with someone who was in an authority position in relation to me (29.8%)	“Had sex the first time when I did not really feel like doing it” (.465)
5. Regret the first time I had sex (.309)	5. Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes). (30.2%)	“Had sex when I was younger than 14” (.466)

Even if we were to assume that there may have been some confusion resulting from the norming option, the use of percentages as comparisons between the norming option and the criterion option, verifies that participants understood what was being asked of them. This is indicated in the behaviours having percentages which deem them sensitive and having disclosure rates which are fairly low (See table 10).

While the findings of this study validate that researchers at UKZN have been researching behaviours which are in fact sensitive for the student population, what remains a mystery is the somewhat low percentages in terms of sensitivity obtained for items containing behaviours which researchers may have considered to be ‘more’ sensitive than others.

Such as raping someone, transactional sex items, coercive sex and under age sex, which obtained endorsements under 40% for the criterion option but had factor loadings of .5 and higher amongst the student population in this study. In terms of the previous norming study (2013), these items shared factor loadings, ranging from .4 to .6 (Fynn, 2013; Shaik, 2013). Both norming options were able to verify that these behaviours were in fact sensitive for the student population, although they did not feature in the top 5 they do feature in the 10 top sensitive behaviours at University.

This study achieved low disclosure rates for some of the behaviours deemed as sensitive. Behaviours which had extremely low disclosure rates and either high factor loadings or percentages of 40% or over include, “*Have raped someone,*” “*Am HIV positive,*” “*Have raped someone together with one or more of my friends,*” “*Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes),*” “*Have taken drugs intravenously (injectable),*” “*Have had sex with someone who isn’t a regular partner because I’ve needed material things (e.g. rent, food, cosmetics),*” “*Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection,*” “*Have forced*

*someone to have sex with me,” “Have had sex with a teacher or lecturer,” “Have had sex with someone who was in an authority position in relation to me” and “Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.”*

Disclosure of these behaviours may affect an individual's ability to maintain social respect (Hays et al., 1989). These behaviours may also have serious legal, social and moral consequences attached to them, thereby portraying an individual as socially undesirable (McCosker, Barnard, & Gerber, 2001). This may also be heavily influenced by religious teachings, as most of the participants indicated that they were strongly committed to their religion, and may thus feel that by admitting to the behaviours in question, they may be sinning.

While these views provide insight into the possible reasons behind the low disclosure rates obtained, researchers are still faced with a problem when using disclosure rates as an analogue of validity as one is unable to confidently report figures as factual due to a lack of biological endpoints or other external validity indices like crime stats, HIV test results, clinic reports and so on which may serve to further validate the findings of a study (Shaik, 2014). One is simply unable to determine if findings are based on over reporting, underreporting or social desirability bias.

This is especially problematic for research utilizing the rates of disclosure obtained for these behaviours as researchers struggle to explain the disclosure rates obtained for the behaviours in question. Some researchers use these disclosure rates as a form of validity (Labrie & Earleywine, 2000; Fynn, 2013; Shaik, 2013). Studies which rely on these disclosure rates require responses which are truthful and which are free from all forms of bias.

Also since this sample consisted of more females than male, one cannot be certain if these low disclosure rates are based on female's lack of reporting sexual behaviour or a true representation of the behaviour in question (Langhaug, Sherr, & Cowan, 2010).

Since this study's aim was to determine if the behaviours were in fact sensitive for the students, this study did not wish to exclude any students as their perceptions of sensitivity were important to this study.

These low disclosure rates exist despite this study having assurances of anonymity; this could either mean that participants are not comfortable disclosing the information at all. Whether this reflects a more accurate explanation or not, needs further investigating, what is evident



from the results is that this study successfully normed and scaled the above behaviours. This is statistically evident through the percentages and factor loadings obtained for both the norming and criterion questions. The results also support the theoretical validation, which claims low disclosure rates for sensitive behaviours (Droitcour et al., 1990). Therefore we can safely conclude that this research has achieved its aim which was to norm and scale sensitivity amongst the student population at UKZN.

## **6.2 Social Desirability Scale**

This study utilised the Reynolds 13 item social desirability scale. The scale indicated that more than half of the scale (53.8%) was responded to in a socially desirable way. However, the reliability rating was way under the acceptable range of .7, the scale squared .446. This resulted in the findings of the social desirability scale being questionable. The 2013 norming study made use of the Hays 5 item social desirability scale and also had a low reliability score(.223) (Fynn & Shaik 2014). Changing the social desirability scale did not prove to be useful for this study.

The use of the Reynolds scale also produced poor results in a study related to the use of cocaine (Johnson & Fendrich, 2002). However the use of the scale has not been discouraged as it has produced favourable results in other studies (Kozma & Stones, 1987; Welte & Russell, 1993). The use of the scale most likely requires a study of a shorter length or of a different nature such as a different topic, or different question format.

Desite the reliability index, the scale has provided an indication that the population may be prone to social desirability bias which does mean that the disclosure rates should be interpreted with caution.

## **6.3 Implications for practical application**

This study was able to shed light on the perceptions of sensitivity for the student population. Being able to explicitly state what is sensitive has always been a problem for research and researchers in general.

This study made use of behaviours which have been regarded as sensitive by various researchers, (Dalton, Wimbush, & Daily, 1994; Labrie & Earleywine, 2000; Gregson, et al., 2004; Chaudhuri & Christofides, 2007; Coutts & Jann, 2008; Van der Elst, Okuku, Nakamya, Muhaari, & Davies, 2009; Langhaug, Sherr, & Cowan, 2010) and while this study has been able to provide insight into which of these behaviours are sensitive for the student population,

there is still some discrepancy in terms of which measure (direct or indirect) is a better indication of sensitivity especially for those behaviours which are not indicated as sensitive by both.

The results should be interpreted with caution as the effects of social desirability bias were unable to be measured. There still exists much variation in terms of the behaviours chosen between the 2013 norming study and the current study as well as the difference in factor loadings obtained. While this study was able to norm and scale a wider range of behaviours for use in the various modes of survey, the lower factor loadings obtained need to be further investigated, using a bigger sample and possibly a shorter questionnaire. The use of audio and/or computer surveys to norm and scale sensitivity could possibly be considered for future research.

It seems that researchers may need to verify the behaviours regarded as sensitive with participants as this may differ for various participants and topics.

#### **6.4 Limitations of the research**

This study only made use of behaviours related to risky sexual behaviour, sex under the influence of alcohol and substance abuse, therefore sensitivity was only measured in these domains. This study was only limited to UKZN (Pietermaritzburg campus) therefore the results are only a reflection of the students at this campus and cannot be generalised to other campuses. The same applies to the population accessed, a large amount of participants, were female, black and in their third year of study, a larger sample with a wider dispersion across campuses may prove to be more beneficial.

### **Chapter 7 – Conclusion**

This study was exploratory in nature and aimed to discover what is sensitive amongst the student population at UKZN (Pmb campus). Researchers are faced with the problem of what is sensitive, in order to validate self-reports, researchers and participants need to be in agreement with regards to what is sensitive.

This study was able to norm and scale a total of 44 behaviours as sensitive for use in future Masters and PhD studies at UKZN and other social science and health research. The behaviours normed in this research are risky sexual behaviours which have serious emotional, social and medical consequences for those involved.

This kind of research is necessary not only for validation of self-reports but to assist with the development of the modes of survey such as the UCT1 and UCT type II which require sensitive and non-sensitive behaviours. Research of this nature can shed light on the perceptions and challenges which affect the students at this university and may thus inform interventions aimed at alleviating the effects of these behaviours.

## References

- Alledhan, C. (2011). Investigation of transactional sex among tertiary level students: A comparison of self-report data collection methodologies. *Unpublished honours thesis*. Pietermaritzburg: School of Psychology, University of KwaZulu-Natal.
- Belmont Report. (1979). *The Belmont Report: Ethical principals and guidelines for the protection of human subjects of research*. Retrieved March 14, 2014, from <http://hhs.gov/ohrp/humansubjects/guidance/belmont.html>
- Bornstein, R. F. (1994). Construct validity of the interpersonal dependency inventory: 1977- 1922. *Journal of personality disorders, 8*, 64-76.
- Brener, N. D., Billy, J. O., & Grady, W. R. (2003). Assessment of factors affecting the validity of self-reported health-risk behaviour among adolescents: Evidence from the scientific literature. *Journal of Adolescent Health, 33*, 436-457.
- Catania, J. A., Mcdermott, L. J., & Pollack, L. M. (1986). Questionnaire response bias and face to face interview sample bias in sexuality research. *The Journal of Sex Research, 1*(22), 52-72.
- Chaudhuri, A., & Christofides, T. C. (2007). Item count technique in estimating the proportion of people with a sensitive feature. *Journal of statistical planning and inference, 137*, 589-593.
- Cohen, D. A., & Dent, C. (1992). The validity of self-reported condom use. *American Journal of Public Health, 137*, 1563-1564.

- Coutts, E., & Jann, B. (2008). *Sensitive questions in online surveys: Experimental results for the randomised response technique (RRT) and the unmatched count techniques (UCT)*. Zurich: Swiss Federal Institute of Technology.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349-354.
- Dalton, D. R., Wimbush, J. C., & Daily, C. M. (1994). Using the Unmatched Count Technique (UCT) to estimate base rates for sensitive behaviour. *Personnel Psychology, 47*, 817-828.
- Dare, O. O., & Cleland, J. G. (1994). Reliability and validity of survey data on sexual behaviour. *Health Transit Review(4)*, 93-110.
- Dickson-Swift, V., Liamputtong, P. I., & James, E. (2008). *Undertaking sensitive research in the health and social sciences: managing boundaries, emotions and risks*. Cambridge: Cambridge University Press.
- Draucker, C. B., Martsof, D. S., & Poole, C. (2009). Developing distress protocols for research on sensitive topics. *Archives of Psychiatric Nursing, 23(5)*, 343-350.
- Droitcour, J., Caspar, R. A., Hubbard, M. L., Parsley, T. L., Visscher, W., & Ezzati, T. M. (1991). The item count technique as a method of indirect questioning - a review of its development and a case-study application. *Measurement errors in surveys*, 185-210.
- Faberow, N. L. (Ed.). (1963). *Taboo Topics*. New York: Atherton Press.
- Fynn, L. S. (2013). A Quasi-experimental comparative cross-sectional study to compare the disclosure rates of sensitive behaviours of University of KwaZulu-Natal students. *Masters by Dissertation*. Pietermaritzburg: School of Psychology, University of KwaZulu- Natal.
- Gregson, S., Mushati, P., White, P. J., Mlilo, M., Mundandi, C., & Nyamukapa, C. (2004). Informal confidential voting interview methods and temporal changes in reported sexual risk behaviour for HIV transmission in Sub-Saharan Africa. *Sexually Transmitted Infections, 2(80)*, 36-42.
- Hays, R. D., Hayashi, T., & Stewart, A. L. (1989). A five-item measure of socially desirable response set. *Educational and Psychological Measurement, 49*, 629-636.
- Johnson, T. P., & Fendrich, M. (2002). A validation of the Crowne-Marlowe social desirability scale. *Wiley International Encyclopedia*, 1661-1666.
- Joubert, V. C. (2011). Comparison of the Unmatched Count Technique and the Self-report Questionnaire in estimating base rates of sensitive behaviour: Experience of coerced sex and date rape in a tertiary institution sample. *Unpublished honours thesis*. Pietermaritzburg: School of Psychology, University of KwaZulu- Natal.
- Kikia, N., & Phillip, J. L. (2014). "what is sensitive behaviour?" A comparative pilot norming study and comparison of two different measures of social desirability amongst a student population.

*Unpublished honours thesis*. Pietermaritzburg: School of Psychology, University of KwaZulu-Natal.

Korb, K. A. (2011). Self-report questionnaires: Can they collect accurate information? *Journal of Educational Foundations*, 1(1), 5-12.

Kozma, A., & Stones, M. J. (1987). Social desirability in measures of subjective well-being: A systematic evaluation. *Journal of Gerontology*, 42, 56-59.

Labrie, J. W., & Earleywine, M. (2000). Sexual risk behaviours and alcohol: Higher base rates unrevealed using the unmatched-count technique. *The Journal of Sex Research*, 37(4), 321-326.

Langhaug, L. F., Sherr, L., & Cowan, F. M. (2010). How to improve the validity of sexual reporting: Systematic review of questionnaire delivery modes in developing countries. *Tropical Medicine and International Health*, 3(15), 362-381.

Lee, R. (1993). *Doing research on sensitive subjects*. London: Sage.

Lee, R. M., & Renzetti, C. M. (1990). Researching sensitive topics. *American Behavioural Scientists*, 33(5), 510-528.

Lorenzo-Seva, U. (2013). How to report the percentage of explained common variance in exploratory factor analysis. *Technical report*, 1-13.

McCosker, H., Barnard, A., & Gerber, R. (2001). Undertaking sensitive research: Issues and strategies for meeting the safety needs of all participants. *Qualitative Social Research*, 2(1), 1-41.

Noland, C. M. (2012). Institutional barriers to research on sensitive topics: Case of sex communication research among university students. 8(1), 1-9.

Ong, A. D., & Weiss, D. J. (2000). The impact of anonymity on responses to "sensitive" questions. *Journal of Applied Psychology*, 30, 1691-1708.

Ong, A. D., & Weiss, D. J. (2000). The impact of anonymity on responses to sensitive questions. *Journal of Applied Social Psychology*, 30(8), 1691-1701.

Oxford dictionaries online. (2004). Retrieved March 17, 2014, from <http://www.oxforddictionaries.com/definition/english/sensitive>

Pienaar, J. C. (2003). Efficacy of the informal confidential voting interview in enhancing self-disclosure and reducing social desirability bias: A comparative Analysis with the SAQ and FTFI. *Unpublished honours thesis*. Pietermaritzburg: School of Psychology, University of KwaZulu-Natal.

Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38, 119-125.

- Roberts, S. T., & Kennedy, B. L. (2006). Why are young college women not using condoms? Their perceived risk, drug use and developmental vulnerability may provide important clues to sexual risk. *Archives of Psychiatric Nursing, 20*(1), 32-40.
- Shaik, H. (2012). *A comparative study between the unmatched count technique, self-report questionnaire and the informal confidential voting interview in yielding valid information with regards to transactional and coercive sex*. Pietermaritzburg: School of Psychology, University of KwaZulu-Natal.
- Shaik, H. (2013). An experimental psychometric study comparing the sensitive data disclosure rates of different survey modes, the Audio Computer Assisted Self-Interview, Self-Report Questionnaire and the Unmatched Count Techniques Type I and II. *Masters Dissertation*. Pietermaritzburg: School of Psychology, University of KwaZulu- Natal.
- Sieber, J. E., & Stanley, B. (1988). Ethical and professional dimensions of socially sensitive research. *American Psychologist, 43*(1), 49-55.
- Strahan, R., & Gerbasi, K. C. (1970). Short, homogeneous versions of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology, 1972*(28), 191-193.
- Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin, 133*, 859-883.
- Van der Elst, E., Okuku, H., Nakamya, P., Muhaari, A., & Davies, A. (2009). Is audio computer-assisted self-interview (ACASI) useful in risk behaviour assessment of female and male sex workers, Mombasa, Kenya. *PloS One, 4*(5), 1-10.
- Van der Mortel, T. F. (2008). 'Faking it: social desirability response bias in self-report research'. *Australian Journal of Advanced Nursing, 25*(4), 40-48.
- Welte, J. W., & Russell, M. (1993). Influence of socially desirable responding in a study of substance abuse. *Alcoholism: Clinical and Experimental Research, 17*, 758-761.

## Appendices

### Appendix 1 – 2013 Norming Study Questionnaire

# Norming Study

*Scaling Sensitive items*

**INSTRUCTIONS:** Thank you for participating in this study.

We ask you to complete the following questionnaire. As explained in the information sheet we are interested to know how sensitive you think the items on the list are for you. By **sensitive** we mean that you see it as important that no one should know this about you, *IF it were true*. We ask you to rate each item on a scale according to how much you agree that you wouldn't want anyone to know this about you. Please pretend or assume that all the items are true for you when you do the ratings. **Note:** *We want you pretend the item is **true** for you, however, your responses do not indicate whether it is true or not.* Your responses simply indicate whether you think it would be sensitive IF it were true.

We ask you to rate the items on the following scale:

**I regard the following as so sensitive that if it were true about me, I would not want anyone to know about it**

(cross a box)

<b>1. True for me</b>	<b>2. Partially true for me</b>	<b>3. Partially NOT true for me</b>	<b>4. Not true at all for me</b>
-----------------------	---------------------------------	-------------------------------------	----------------------------------

For 

eating pizza	1	2	3	<input checked="" type="checkbox"/>
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 example:

**Please make sure the option you select best represents your perception of what is sensitive (rather than what you think friends/ others regard as sensitive).**

**First: Please complete the section on demographics:**

**Please tick the applicable block:**

**Age (please write):** \_\_\_\_\_

**Gender: Male:**   **Female:**

**Year of study at university:** 1<sup>st</sup>   2<sup>nd</sup>   3<sup>rd</sup>   4<sup>th</sup> +

**What population group/race would you describe yourself as?**

**Black**   **Coloured**   **Indian**   **White**   **Other**

Norming study

Please **pretend** or assume that **all the items are true for you** when you do the ratings.



I regard the following as so sensitive that **if it were true about me**, I would not want anyone to know about it

1. True for me 2. Partially true for me 3. Partially NOT true for me 4. Not true at all for me

1	Have had dental work done	1	2	3	4
2	Know where to buy condoms	1	2	3	4
3	Have more than one sibling	1	2	3	4
4	Have a favourite soccer team	1	2	3	4
5	Would consider myself a sports fan	1	2	3	4
6	Think one alcoholic drink a day is healthy	1	2	3	4
7	Have seen a doctor in the last year	1	2	3	4
8	Have been/ am in a sexual relationship in exchange for things I need (e.g. food, transport, accommodation, fees).	1	2	3	4
9	Visit the Library more than once a week	1	2	3	4
10	Have had sexual intercourse with someone who was too intoxicated to give consent.	1	2	3	4
11	Am on Facebook	1	2	3	4
12	Know where to get condoms for free	1	2	3	4
13	Know what's going on in SA politics	1	2	3	4
14	Know where to get the contraceptive pill	1	2	3	4
15	Often have had sex with my boyfriend/girlfriend because I feel that I have to	1	2	3	4
16	Am comfortable with my sexual desires	1	2	3	4
17	Have broken a limb	1	2	3	4
18	Have raped someone	1	2	3	4
19	Use the internet almost every week	1	2	3	4
20	Have hay fever	1	2	3	4
21	Have an ipad or tablet	1	2	3	4
22	Like reading the editorial section of the local newspaper	1	2	3	4
23	Have a shoe size smaller than size 6	1	2	3	4
24	Work to earn money while I am studying full time	1	2	3	4
25	Always read before going to sleep	1	2	3	4
26	Am HIV positive	1	2	3	4
27	Always have sugar in tea or coffee	1	2	3	4
28	Can type reasonably well	1	2	3	4
29	Have gone to a traditional healer when sick	1	2	3	4
30	Have been slightly drunk	1	2	3	4
31	Am concerned about contracting a sexually transmitted disease	1	2	3	4
32	Exercise regularly	1	2	3	4
33	Have engaged in light petting (kissing, fondling)	1	2	3	4
34	Try to eat healthily	1	2	3	4
35	Have taken illegal drugs	1	2	3	4
36	Know the name of a Maritzburg United soccer player	1	2	3	4
37	Have been aware of sexual feelings between 10 and 12 years	1	2	3	4
38	Have engaged in heavy petting ( <b>including genital contact</b> )	1	2	3	4
39	Have used a condom the last time I had sex	1	2	3	4
40	Know about the "morning after" pill	1	2	3	4

Norming study

Please **pretend** or assume that **all the items are true for you** when you do the ratings

I regard the following as so sensitive that **if it were true about me**, I would not want anyone to know about it

**1. True for me 2. Partially true for me 3. Partially NOT true for me 4. Not true at all for me**

41	Have gone to the doctor when sick	1	2	3	4
42	Use the contraceptive pill	1	2	3	4
43	Have had more than one sexual partner in the last month	1	2	3	4
44	Know the name of the Kenyan president	1	2	3	4
45	Have raped someone together with one or more of my friends	1	2	3	4
46	Am waiting for the right partner before having sex	1	2	3	4
47	Won't go in a car with a driver who has been drinking	1	2	3	4
48	Sometimes smoke cigarettes	1	2	3	4
49	Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).	1	2	3	4
50	Regret the first time I had sex	1	2	3	4
51	Have had a wound that needed stitches	1	2	3	4
52	Have experimented casually with various drugs	1	2	3	4
53	Have asthma	1	2	3	4
54	Am a vegetarian	1	2	3	4
55	Have one or more pets	1	2	3	4
56	Have had sex with a partner who was 10 or more years older than me at the time	1	2	3	4
57	Don't drink alcohol	1	2	3	4
58	Usually choose sugar free soft drinks	1	2	3	4
59	Have travelled outside South Africa	1	2	3	4
60	Use sms's more than email	1	2	3	4
61	First had sex between the ages of 14 and 16	1	2	3	4
62	Had sex when I was emotionally ready	1	2	3	4
63	Had at least one parent who smoked cigarettes	1	2	3	4
64	Am comfortable with casual sex	1	2	3	4
65	Am waiting till marriage to have sex	1	2	3	4
66	Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, <i>idrop</i> )	1	2	3	4
67	Drink coffee	1	2	3	4
68	Have been in a car accident as a passenger	1	2	3	4
69	Have taken drugs intravenously (injectable)	1	2	3	4
70	Have sinus problems	1	2	3	4
71	Am careful with my diet	1	2	3	4
72	Have been to London	1	2	3	4
73	Live alone	1	2	3	4
74	Have my driver's license	1	2	3	4
75	Like documentaries	1	2	3	4
76	Went to a government high school	1	2	3	4
77	Have had sex with someone who wasn't my regular partner	1	2	3	4
78	Have a brother	1	2	3	4
79	Think alcohol should be illegal	1	2	3	4
80	Have been tested for HIV	1	2	3	4

## Norming study

Please **pretend** or assume that **all the items are true for you** when you do the ratings.

I regard the following as so sensitive that **if it were true about me**, I would not want anyone to know about it

**1. True for me 2. Partially true for me 3. Partially NOT true for me 4. Not true at all for me**

81	Have gone to the chemist when sick	1	2	3	4
82	Am at risk for HIV	1	2	3	4
83	Support legalising drugs	1	2	3	4
84	Think sex is ok in a committed relationship	1	2	3	4
85	Live in shared accommodation	1	2	3	4
86	Know my HIV status	1	2	3	4
87	Often watch television late at night	1	2	3	4
88	Have often drunk alcohol	1	2	3	4
89	Don't mix with people who drink alcohol	1	2	3	4
90	Would consider myself a fan of pop music	1	2	3	4
91	Have seen a dentist in the last two years	1	2	3	4
92	Smoke cigarettes in social situations	1	2	3	4
93	Have more than one sister	1	2	3	4
94	Had sex when I was younger than 14	1	2	3	4
95	Always use condoms when having sex	1	2	3	4
96	Have watched the movie "Tsotsi"	1	2	3	4
97	Am entitled to have my partner pay for things for me	1	2	3	4
98	Never exercise	1	2	3	4
99	Never drink fizzy drinks	1	2	3	4
100	Own at least one cell phone	1	2	3	4
101	Don't drive when I have been drinking	1	2	3	4
102	Have an internet connection at home	1	2	3	4
103	Watch the news on TV at least 3 times a week	1	2	3	4
104	Reading is a hobby	1	2	3	4
105	Think smoking cigarettes is more harmful than smoking dagga	1	2	3	4
106	Regularly get health check-ups	1	2	3	4
107	Don't normally eat breakfast	1	2	3	4
108	Know what a "conversion" is in rugby	1	2	3	4
109	Have a favourite TV show	1	2	3	4
110	Have a dog as a pet	1	2	3	4
111	Have my own vehicle	1	2	3	4
112	Have seen any kind of health practitioner in the last year	1	2	3	4
113	Can speak more than 2 languages reasonably well	1	2	3	4
114	Have had diagnostic tests done in the last year	1	2	3	4
115	Went to a private high school	1	2	3	4
116	Subscribe to electronic newsletters	1	2	3	4
117	Have had sex after drinking	1	2	3	4
118	Have not had sex	1	2	3	4
119	Have had more than two sexual partners in the last three months	1	2	3	4
120	Have gone to a local clinic when sick	1	2	3	4

## Norming study

Please **pretend** or assume that **all the items are true for you** when you do the ratings.

I regard the following as so sensitive that **if it were true about me**, I would not want anyone to know about it

**1. True for me 2. Partially true for me 3. Partially NOT true for me 4. Not true at all for me**

121	Have taken antibiotics in the last year	1	2	3	4
122	Take vitamins almost everyday	1	2	3	4
123	There's a handgun in my house	1	2	3	4
124	Only use condoms with a new partner	1	2	3	4
125	Have lived outside of South Africa	1	2	3	4
126	Am sexually active	1	2	3	4
127	Have refused to use a condom	1	2	3	4
128	Have never been in hospital	1	2	3	4
129	Have watched the movie "Jerusalema"	1	2	3	4
130	Had sex the first time with someone when I did not really feel like doing it	1	2	3	4
131	Have had sex with someone who isn't a regular partner because I've needed material things (e.g. rent, food, cosmetics).	1	2	3	4
132	Have weekend/after hours work for money	1	2	3	4
133	Had asthma as a child	1	2	3	4
134	Have felt peer pressure to drink alcohol.	1	2	3	4
135	Can drive quite well after two drinks	1	2	3	4
136	Regularly post items on Facebook	1	2	3	4
137	Have been forced to have sex	1	2	3	4
138	Have had to slap, kick or bite to stop someone having sex with me	1	2	3	4
139	Have engaged in sexual intercourse while under the influence of alcohol that I later regretted.	1	2	3	4
140	Regret having had sex	1	2	3	4
141	Have lived in at least three different provinces	1	2	3	4
142	Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	1	2	3	4
143	Don't mix with people who use drugs	1	2	3	4
144	Am careful about risky sex	1	2	3	4
145	Have a student loan from a bank	1	2	3	4
146	Have tried to get someone else intoxicated in the hopes of having sexual intercourse with them.	1	2	3	4
147	Am comfortable receiving gifts from my sexual partner	1	2	3	4
148	Have been sexually active but not had intercourse (vaginal or anal)	1	2	3	4
149	Have been coerced or forced to have sexual intercourse by someone who was under the influence of alcohol.	1	2	3	4
150	Am a virgin	1	2	3	4
151	Sometimes drink alcohol socially	1	2	3	4
152	Have been pressurised to have sex without a condom	1	2	3	4
153	Have been to Durban	1	2	3	4
154	Drink tea	1	2	3	4

Norming study

Please **pretend** or assume that **all the items are true for you** when you do the ratings.

I regard the following as so sensitive that **if it were true about me**, I would not want anyone to know about it

**1. True for me 2. Partially true for me 3. Partially NOT true for me 4. Not true at all for me**

155	Drink alcohol in moderation	1	2	3	4
-----	-----------------------------	---	---	---	---

156	Have forced someone to have sex with me	1	2	3	4
157	Have had sexual intercourse when so under the influence of alcohol that I was unable to consent.	1	2	3	4
158	Felt ready when I had sex the first time	1	2	3	4
159	Own a laptop computer	1	2	3	4
160	Have had sex with a teacher or lecturer	1	2	3	4
161	Have been in an accident as driver (car/motorcycle/bicycle)	1	2	3	4
162	Have blacked out from drinking too much alcohol	1	2	3	4
163	Smoke dagga occasionally	1	2	3	4
164	Have drunk alcohol	1	2	3	4
165	Have allergies	1	2	3	4
166	Have a shoe size over 7	1	2	3	4
167	Have had sex with someone when I was so drunk that I do not remember it	1	2	3	4
168	Often watch television late at night	1	2	3	4
169	First had sex between the ages of 14 and 18	1	2	3	4
170	Have had sexual intercourse without a condom being used while under the influence of alcohol.	1	2	3	4
171	Know the name of the premier of KwaZulu-Natal	1	2	3	4
172	Have a cat as a pet	1	2	3	4
173	Had the usual childhood illnesses	1	2	3	4
174	Live with my family	1	2	3	4
175	Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).	1	2	3	4
176	Am careful about what I put into my body	1	2	3	4
177	Have had sex with someone who was in an authority position in relation to me	1	2	3	4
178	Use the internet from my cellphone	1	2	3	4
179	Have watched the movie "Argo"	1	2	3	4
180	Have consumed alcohol until intoxicated/drunk	1	2	3	4
181	Dagga is not harmful	1	2	3	4
182	Read the local paper almost everyday	1	2	3	4
183	Became aware of sexual feelings from 13 years onwards	1	2	3	4
184	Have read the book "Lord of the files"	1	2	3	4
185	Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.	1	2	3	4
186	Look after my body	1	2	3	4

## Appendix 2 – 2013 Norming Study – Factor loadings

Rotated Component Matrix <sup>a</sup>		
	Component	
	1	2
Have gone to the chemist when sick	.662	
Use the internet from my cellphone	.655	
Have been to Durban	.649	
Own at least one cell phone	.641	
Own a laptop computer	.636	
Drink tea	.635	

Watch the news on TV at least 3 times a week	.625	
Have seen any kind of health practitioner in the last year	.623	
Often watch television late at night	.619	
Drink coffee	.615	
Had the usual childhood illnesses	.610	
Can type reasonably well	.605	
Often watch television late at night	.604	
Have watched the movie "Tsotsi"	.601	
Can speak more than 2 languages reasonably well	.599	
Have an internet connection at home	.597	
Don't normally eat breakfast	.595	
Have allergies	.592	
Have gone to the doctor when sick	.591	
Reading is a hobby	.587	
Know my HIV status	.584	
Drink alcohol in moderation	.584	
Know the name of the premier of KwaZulu-Natal	.572	
Am on Facebook	.567	
Don't drive when I have been drinking	.563	
Use the internet almost every week	.563	
Went to a private high school	.562	
Know what a "conversion" is in rugby	.561	
Subscribe to electronic newsletters	.560	
Have taken antibiotics in the last year	.559	
Live with my family	.558	
Have a favourite soccer team	.558	
Think sex is ok in a committed relationship	.556	
Have my own vehicle	.556	
Like documentaries	.555	
Know about the "morning after" pill	.555	
Have a dog as a pet	.548	
Never drink fizzy drinks	.546	
Am careful about what I put into my body	.546	
Would consider myself a sports fan	.534	
Always have sugar in tea or coffee	.532	
Have seen a dentist in the last two years	.531	
Live in shared accommodation	.530	
Have my driver's license	.514	
Can drive quite well after two drinks	.513	
Have a brother	.512	
Work to earn money while I am studying full time	.512	
Have seen a doctor in the last year	.511	
Have had dental work done	.510	
Had asthma as a child	.510	

Would consider myself a fan of pop music	.504	
Have had diagnostic tests done in the last year	.501	
Think smoking cigarettes is more harmful than smoking dagga	.500	
Try to eat healthily	.500	
Have a favourite TV show	.497	
Have been tested for HIV	.487	
Have sinus problems	.486	
Read the local paper almost everyday	.485	
Have gone to a local clinic when sick	.483	
Like reading the editorial section of the local newspaper	.481	
Have a shoe size over 7	.480	
Went to a government high school	.480	
Am careful with my diet	.479	
Have often drunk alcohol	.474	
Sometimes drink alcohol socially	.474	
Have hay fever	.473	
Have been slightly drunk	.468	
Have been in a car accident as a passenger	.468	
Know the name of a Maritzburg United soccer player	.466	
Know where to get condoms for free	.465	
Have more than one sister	.462	
Have been in an accident as driver (car/motorcycle/bicycle)	.459	
Use sms's more than email	.457	
Always read before going to sleep	.452	
Have engaged in light petting (kissing, fondling)	.448	
Know where to get the contraceptive pill	.446	
Have watched the movie "Argo"	.445	
Have asthma	.438	
Have watched the movie "Jerusalem"	.438	
Am careful about risky sex	.437	
Take vitamins almost everyday	.433	
Have used a condom the last time I had sex	.431	
Have read the book "Lord of the files"	.431	
Live alone	.430	
Don't mix with people who use drugs	.429	
Regularly post items on Facebook	.429	
Have been to London	.428	
Have felt peer pressure to drink alcohol.	.422	
Always use condoms when having sex	.411	
Have drunk alcohol	.408	
Have one or more pets	.407	
Regularly get health check-ups		
Have a student loan from a bank		
Have broken a limb		

Felt ready when I had sex the first time		
Have weekend/after hours work for money		
Visit the Library more than once a week		
Have never been in hospital		
Know where to buy condoms		
Have lived in at least three different provinces		
Am a vegetarian		
Am comfortable receiving gifts from my sexual partner		
Had at least one parent who smoked cigarettes		
Never exercise		
Don't mix with people who drink alcohol		
Am sexually active		
Won't go in a car with a driver who has been drinking		
Usually choose sugar free soft drinks		
Have travelled outside South Africa		
Have had a wound that needed stitches		
Am comfortable with my sexual desires		
Have an ipad or tablet		
Became aware of sexual feelings from 13 years onwards		
Have consumed alcohol until intoxicated/drunken		
Am concerned about contracting a sexually transmitted disease		
Have lived outside of South Africa		
Have a cat as a pet		
Think one alcoholic drink a day is healthy		
Am waiting till marriage to have sex		
Know the name of the Kenyan president		
Am waiting for the right partner before having sex		
Look after my body	.411	-.417
Exercise regularly		-.404
Am at risk for HIV		
Know what's going on in SA politics		
Have more than one sibling		
Am comfortable with casual sex		
Sometimes smoke cigarettes		
Have been aware of sexual feelings between 10 and 12 years		
Support legalising drugs		
Smoke cigarettes in social situations		
Have not had sex		
Have had sex with someone who wasn't my regular partner		
Am a virgin		
Have blacked out from drinking too much alcohol		
First had sex between the ages of 14 and 18		
Dagga is not harmful		
Have had sex after drinking		



Don't drink alcohol		
Have taken illegal drugs		
Am entitled to have my partner pay for things for me		
Often have had sex with my boyfriend/girlfriend because I feel that I have to		
Have a shoe size smaller than size 6		
Have engaged in heavy petting (including genital contact)		
Have gone to a traditional healer when sick		
Regret the first time I had sex		
Had sex when I was emotionally ready		
Think alcohol should be illegal		
There's a handgun in my house		
Regret having had sex		.645
Have forced someone to have sex with me		.772
Have been forced to have sex		.713
Have raped someone		.658
Have raped someone together with one or more of my friends		.651
Have had to slap, kick or bite to stop someone having sex with me		.649
Had sex the first time with someone when I did not really feel like doing it		.465
Have tried to get someone else intoxicated in the hopes of having sexual intercourse with them.		.745
Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.		.640
Have been coerced or forced to have sexual intercourse by someone who was under the influence of alcohol.		.518
Have taken drugs intravenously (injectable)		.666
Smoke dagga occasionally		.585
Have experimented casually with various drugs		.513
Have had more than two sexual partners in the last three months		.633
Have had more than one sexual partner in the last month		.462
Have been sexually active but not had intercourse (vaginal or anal)		.630
Have had sex with a partner who was 10 or more years older than me at the time		.657
Have had sex with a teacher or lecturer		.651
Have had sex with someone who was in an authority position in relation to me		.640
First had sex between the ages of 14 and 16		.507
Had sex when I was younger than 14		.466
Have refused to use a condom		.641
Have been pressurised to have sex without a condom		.462
Only use condoms with a new partner		.445
Use the contraceptive pill		.435
Have had sex with someone when I was so drunk that I do not remember it		.773
Have engaged in sexual intercourse while under the influence of alcohol that I later regretted.		.746
Have had sexual intercourse without a condom being used while under the influence of alcohol.		.688
Have had sexual intercourse when so under the influence of alcohol that I was unable to consent.		.761
Have had sexual intercourse with someone who was too intoxicated to give consent.		.631
Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection		.702
Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)		.659

Am HIV positive		.519
Have had sex with someone who isn't a regular partner because I've needed material things (e.g. rent, food, cosmetics).		.718
Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).		.693
Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).		.693
Have been/ am in a sexual relationship in exchange for things I need (e.g. food, transport, accommodation, fees).		.564
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

## Appendix 3 – Pilot Study

### Appendix 3 A - Questionnaire

# Norming Study

## Scaling Sensitive Items

Thank you for participating in this study.

### INSTRUCTIONS:

We ask you to complete the following questionnaires. As explained in the information sheet we are interested to know how sensitive you think the items on the list are for you. By **sensitive** we mean that you see it as important that no one should know this about you, *IF it were true*.

**For example:**  
(cross a box)

eating pizza	1	<input checked="" type="checkbox"/>
--------------	---	-------------------------------------

**Please make sure the option you select best represents your perception of what is sensitive (rather than what you think friends/ others regard as sensitive).**

### Norming study – Control 1

We ask you to *rate each item* on a scale according to *how sensitive you perceive the item to be for you*. We ask you to rate the items on the following scale:

**These items are (for me):**

**Options :**

1. Sensitive	2. Not Sensitive
--------------	------------------

(cross the appropriate box)

1	Have had more than one sexual partner in the last month	1	2
---	---	---	---

2	Use the contraceptive pill	1	2
3	Have had sexual intercourse with someone who was too intoxicated to give consent.	1	2
4	Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	1	2
5	Have gone to the local clinic when sick	1	2
6	Am comfortable with my sexual desires	1	2
7	Have raped someone	1	2
8	Am HIV positive	1	2
9	Have engaged in light petting (kissing, fondling)	1	2
10	Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	1	2
11	Have used a condom the last time I had sex	1	2
12	Know how to prevent pregnancy	1	2
13	Have been drunk then more than one occasion	1	2
14	Look after my body	1	2
15	Sometimes drink alcohol socially	1	2

### Norming study – Control 2

We ask you to *rate each item* on a scale according to *how sensitive you perceive the item to be for you*. We ask you to rate the items on the following scale:

**These items are (for me):**

**Options:**

<b>1. True</b>	<b>2. False</b>
----------------	-----------------

**(cross the appropriate box)**

1	Have had more than one sexual partner in the last month	1	2
2	Use the contraceptive pill	1	2
3	Have had sexual intercourse with someone who was too intoxicated to give consent.	1	2
4	Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	1	2

5	Have gone to the local clinic when sick	1	2
6	Am comfortable with my sexual desires	1	2
7	Have raped someone	1	2
8	Am HIV positive	1	2
9	Have engaged in light petting (kissing, fondling)	1	2
10	Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	1	2
11	Have used a condom the last time I had sex	1	2
12	Know how to prevent pregnancy	1	2
13	Have been drunk then more than one occasion	1	2
14	Look after my body	1	2
15	Sometimes drink alcohol socially	1	2

**Norming study 1**

We ask you to *rate each item* on a scale according to *how sensitive you perceive the item to be for you*. We ask you to rate the items on the following scale:

**I regard the following as so sensitive that if it were true about me, I would not want anyone to know about it:**

**Options :**

<b>1. Strongly Agree</b>	<b>2. Agree</b>	<b>3. Disagree</b>	<b>4. Strongly Disagree</b>
--------------------------	-----------------	--------------------	-----------------------------

(cross the appropriate box)

1	Have had more than one sexual partner in the last month	1	2	3	4
2	Use the contraceptive pill	1	2	3	4
3	Have had sexual intercourse with someone who was too intoxicated to give consent.	1	2	3	4
4	Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	1	2	3	4
5	Have gone to the local clinic when sick	1	2	3	4
6	Am comfortable with my sexual desires	1	2	3	4
7	Have raped someone	1	2	3	4

<b>8</b>	Am HIV positive	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>9</b>	Have engaged in light petting (kissing, fondling)	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>10</b>	Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>11</b>	Have used a condom the last time I had sex	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>12</b>	Know how to prevent pregnancy	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>13</b>	Have been drunk then more than one occasion	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>14</b>	Look after my body	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>15</b>	Sometimes drink alcohol socially	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

## Appendix 3 B – Pilot study data

### Observations based on descriptives and Spearman's Rho correlation

#### Descriptives:

#### Perceptions on sensitivity:

<u>Questions</u>	<u>Based on Criterion 1</u>	
	<u>Consider it Sensitive</u>	<u>Consider it Non - sensitive</u>
1. Have had more than one sexual partner in the last month	<b>159</b>	<b>187</b>
2. Use the contraceptive pill	<b>126</b>	<b>214</b>
3. Have had sexual intercourse with someone who was too intoxicated to give consent.	<b>182</b>	<b>159</b>
4. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	<b>190</b>	<b>157</b>
5. Have gone to the local clinic when sick	<b>87</b>	<b>261</b>
6. Am comfortable with my sexual desires	<b>155</b>	<b>193</b>
7. Have raped someone	<b>189</b>	<b>151</b>
8. Am HIV positive	<b>186</b>	<b>160</b>
9. Have engaged in light petting (kissing, fondling)	<b>120</b>	<b>225</b>

10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	<b>203</b>	<b>144</b>
11. Have used a condom the last time I had sex	<b>158</b>	<b>190</b>
12. Know how to prevent pregnancy	<b>97</b>	<b>245</b>
13. Have been drunk then more than one occasion	<b>74</b>	<b>269</b>
14. Look after my body	<b>113</b>	<b>230</b>
15. Sometimes drink alcohol socially	<b>74</b>	<b>269</b>

**Based on the perceptions of sensitivity above, the following number of people are willing to disclose their involvement in these behaviours:**

<b><u>Questions</u></b>	<b><u>Based on Criterion 2</u></b>	
	<b><u>True</u></b>	<b><u>False</u></b>
1. Have had more than one sexual partner in the last month	<b>42</b>	<b>304</b>
2. Use the contraceptive pill	<b>63</b>	<b>279</b>
3. Have had sexual intercourse with someone who was too intoxicated to give consent.	<b>29</b>	<b>317</b>
4. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	<b>28</b>	<b>319</b>
5. Have gone to the local clinic when sick	<b>194</b>	<b>151</b>
6. Am comfortable with my sexual desires	<b>253</b>	<b>93</b>
7. Have raped someone	<b>13</b>	<b>333</b>
8. Am HIV positive	<b>21</b>	<b>324</b>
9. Have engaged in light petting (kissing, fondling)	<b>266</b>	<b>79</b>
10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	<b>15</b>	<b>332</b>
11. Have used a condom the last time I had sex	<b>188</b>	<b>148</b>
12. Know how to prevent pregnancy	<b>300</b>	<b>44</b>
13. Have been drunk then more than one occasion	<b>209</b>	<b>133</b>
14. Look after my body	<b>307</b>	<b>37</b>
15. Sometimes drink alcohol socially	<b>232</b>	<b>113</b>

	<b><u>Based on Norming Option 1:</u></b> I regard the following as so sensitive that if it were true about me, I would not want anyone to know about it			
<b><u>Questions</u></b>	<b><u>Strongly Agree</u></b>	<b><u>Agree</u></b>	<b><u>Disagree</u></b>	<b><u>Strongly Disagree</u></b>
1. Have had more than one sexual partner in the last month	8	14	13	35
2. Use the contraceptive pill	1	13	17	38
3. Have had sexual intercourse with someone who was too intoxicated to give consent.	7	11	9	42
4. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	11	4	11	43
5. Have gone to the local clinic when sick	17	12	13	27
6. Am comfortable with my sexual desires	24	17	11	16
7. Have raped someone	9	2	4	54
8. Am HIV positive	8	5	7	50
9. Have engaged in light petting (kissing, fondling)	27	22	9	12
10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	8	5	9	48
11. Have used a condom the last time I had sex	22	12	13	23
12. Know how to prevent pregnancy	35	13	5	17
13. Have been drunk then more than one occasion	18	20	15	17
14. Look after my body	35	16	7	12
15. Sometimes drink alcohol socially	24	19	10	17

	<b><u>Based on Norming Option 2:</u></b> I would not want anyone to know the following about me, because it is so sensitive			
<b><u>Questions</u></b>	<b><u>Strongly Agree</u></b>	<b><u>Agree</u></b>	<b><u>Disagree</u></b>	<b><u>Strongly Disagree</u></b>
1. Have had more than one sexual partner in the last month	11	11	9	37
2. Use the contraceptive pill	13	14	4	38
3. Have had sexual intercourse with someone who was too intoxicated to give consent.	12	9	7	41
4. Have been treated for a sexually	11	12	4	42

transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)				
5. Have gone to the local clinic when sick	16	16	15	22
6. Am comfortable with my sexual desires	21	17	11	19
7. Have raped someone	11	7	0	51
8. Am HIV positive	9	8	3	48
9. Have engaged in light petting (kissing, fondling)	27	18	8	16
10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	12	9	2	45
11. Have used a condom the last time I had sex	25	15	8	20
12. Know how to prevent pregnancy	35	14	7	13
13. Have been drunk then more than one occasion	20	13	11	25
14. Look after my body	38	12	10	8
15. Sometimes drink alcohol socially	17	14	12	26
	<b><u>Based on Norming Option 3:</u></b> I regard the following as sensitive information that one should not disclose to anyone.			
<b><u>Questions</u></b>	<b><u>Strongly Agree</u></b>	<b><u>Agree</u></b>	<b><u>Disagree</u></b>	<b><u>Strongly Disagree</u></b>
1. Have had more than one sexual partner in the last month	3	11	11	41
2. Use the contraceptive pill	6	12	9	37
3. Have had sexual intercourse with someone who was too intoxicated to give consent.	7	8	5	45
4. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	8	9	7	42
5. Have gone to the local clinic when sick	18	11	10	27
6. Am comfortable with my sexual desires	22	20	7	17
7. Have raped someone	6	4	4	52
8. Am HIV positive	7	6	2	49
9. Have engaged in light petting (kissing, fondling)	18	21	6	21
10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	8	3	2	53
11. Have used a condom the last time I	23	12	6	25



had sex				
12. Know how to prevent pregnancy	<b>37</b>	<b>5</b>	<b>10</b>	<b>14</b>
13. Have been drunk then more than one occasion	<b>14</b>	<b>16</b>	<b>12</b>	<b>23</b>
14. Look after my body	<b>26</b>	<b>15</b>	<b>9</b>	<b>14</b>
15. Sometimes drink alcohol socially	<b>19</b>	<b>12</b>	<b>11</b>	<b>24</b>
	<b>Based on Norming Option 4:</b> I regard the following as non-sensitive in that I would be willing to disclose this information to anyone			
<b><u>Questions</u></b>	<b><u>Strongly Agree</u></b>	<b><u>Agree</u></b>	<b><u>Disagree</u></b>	<b><u>Strongly Disagree</u></b>
1. Have had more than one sexual partner in the last month	<b>6</b>	<b>12</b>	<b>12</b>	<b>39</b>
2. Use the contraceptive pill	<b>7</b>	<b>7</b>	<b>15</b>	<b>40</b>
3. Have had sexual intercourse with someone who was too intoxicated to give consent.	<b>4</b>	<b>3</b>	<b>13</b>	<b>49</b>
4. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	<b>4</b>	<b>2</b>	<b>9</b>	<b>54</b>
5. Have gone to the local clinic when sick	<b>33</b>	<b>14</b>	<b>6</b>	<b>16</b>
6. Am comfortable with my sexual desires	<b>28</b>	<b>20</b>	<b>10</b>	<b>11</b>
7. Have raped someone	<b>5</b>	<b>1</b>	<b>5</b>	<b>58</b>
8. Am HIV positive	<b>3</b>	<b>3</b>	<b>7</b>	<b>54</b>
9. Have engaged in light petting (kissing, fondling)	<b>35</b>	<b>22</b>	<b>3</b>	<b>8</b>
10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	<b>5</b>	<b>2</b>	<b>8</b>	<b>54</b>
11. Have used a condom the last time I had sex	<b>20</b>	<b>20</b>	<b>8</b>	<b>19</b>
12. Know how to prevent pregnancy	<b>49</b>	<b>13</b>	<b>3</b>	<b>4</b>
13. Have been drunk then more than one occasion	<b>34</b>	<b>7</b>	<b>11</b>	<b>15</b>
14. Look after my body	<b>50</b>	<b>13</b>	<b>2</b>	<b>4</b>
15. Sometimes drink alcohol socially	<b>32</b>	<b>14</b>	<b>7</b>	<b>16</b>
	<b>Based on Norming Option 5:</b> I regard the following as sensitive information that one should not disclose to researchers.			
<b><u>Questions</u></b>	<b><u>Strongly Agree</u></b>	<b><u>Agree</u></b>	<b><u>Disagree</u></b>	<b><u>Strongly Disagree</u></b>
1. Have had more than one sexual partner in the last month	<b>8</b>	<b>12</b>	<b>10</b>	<b>40</b>

2. Use the contraceptive pill	13	8	13	34
3. Have had sexual intercourse with someone who was too intoxicated to give consent.	7	6	13	42
4. Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	6	6	11	47
5. Have gone to the local clinic when sick	22	18	9	21
6. Am comfortable with my sexual desires	15	21	14	19
7. Have raped someone	11	2	9	48
8. Am HIV positive	13	4	9	44
9. Have engaged in light petting (kissing, fondling)	24	22	7	16
10. Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	13	3	11	43
11. Have used a condom the last time I had sex	18	14	8	29
12. Know how to prevent pregnancy	30	17	6	16
13. Have been drunk then more than one occasion	17	13	10	29
14. Look after my body	30	17	4	19
15. Sometimes drink alcohol socially	13	17	10	30

### **Social desirability scales**

### **Hays**

<b>Reliability Statistics</b>							
Hays Cronbach's Alpha		Cronbach's Alpha Based on Standardized Items	N of Items				
		.599	5				
<b>ANOVA with Friedman's Test and Tukey's Test for Nonadditivity</b>							
		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig	
Between People		89.982	174	.517			
Within People	Between Items		16.885 <sup>a</sup>	4	4.221	73.320	.000
	Residual	Nonadditivity	2.051 <sup>b</sup>	1	2.051	10.018	.002
		Balance	142.265	695	.205		
		Total	144.315	696	.207		
	Total		161.200	700	.230		

Total	251.182	874	.287		
Grand Mean = 1.40					
a. Kendall's coefficient of concordance $W = .067$ .					
b. Tukey's estimate of power to which observations must be raised to achieve additivity = $-.517$ .					

### **Reynolds**

Reliability Statistics							
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items				
.664	.687		13				
ANOVA with Friedman's Test and Tukey's Test for Nonadditivity							
		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig	
Between People		134.767	165	.817			
Within People	Between Items		24.125 <sup>a</sup>	12	2.010	84.677	.000
	Residual	Nonadditivity	.601 <sup>b</sup>	1	.601	2.193	.139
		Balance	542.812	1979	.274		
		Total	543.413	1980	.274		
Total		567.538	1992	.285			
Total		702.306	2157	.326			
Grand Mean = 1.38							
a. Kendall's coefficient of concordance $W = .034$ .							
b. Tukey's estimate of power to which observations must be raised to achieve additivity = $.126$ .							

## Appendix 4 – Information Form

### **Norming Study – Information Sheet**

#### **Who we are and what we are doing?**

Hello, we are a group of Psychology Honours, Masters and PhD students involved in a study investigating what behaviours students see as being sensitive. We are also investigating the effect that different ways of asking this question has on participant's responses. In addition we are trying to compare two different ways of measuring how participants present themselves in response to questions in a survey. This study is designed to help inform researchers on how to go about researching sensitive behaviours that may affect students. This information can be used to improve research on these issues and intervention and prevention programmes to address them.

In this first part of the study, we want to know from students how sensitive or how private, they think a list of behaviours is. In the second part of the study, we want to be able to compare two different measures of how participants respond to the questionnaire. We are also

going to compare participants' responses to perceptions of sensitivity with those participants who answer questions based on whether an item is true for them or not.

### **Invitation to participate and implications of participation**

We invite you to participate in this study, which will involve completing a tick-box questionnaire that asks you to identify how sensitive an issue is. We will be asking you to rate a list of items that concern matters related to alcohol, drugs and sex in terms of how sensitive you think they are for you, assuming they were true for you. We will be asking this question in a range of different ways and comparing these. We will ask you each to only answer one of the ways and these will be randomly distributed amongst all the participants. We will also ask you to answer whether the items are true and sensitive for you. Each of you will also be asked to answer a short tick-box questionnaire that measures how participants tend to answer or respond to surveys' like this.

There are no direct benefits for your participation in this part of the study.

#### ***Should you decide to participate, you may withdraw at any time without any consequence***

You will only need to sign an informed consent form, for your participation in the study. We will ask you to complete a section on your demographics, like age and sex. None of your responses will be linked to you personally. It should take you between **45 and 60 minutes** or less to complete the questionnaire. As a token of our appreciation for your participation we would like to offer you the opportunity to enter your name and contact details on a separate sheet to enter into a lucky draw for a monetary prize. 23 of these are on offer and are of different values: 1 x R100.00; 2 x R50.00; 10 x R20.00 and 10 x R10.00

If you would like to participate in the lucky draw, please seek the researcher about the entering the draw.

***Please note that after the raffle and prizes are awarded, this raffle sheet will be disposed of appropriately.***

### **How your data will be used**

The data that arises from your participation will be entered into a database and analyzed statistically. This will be used to inform further research that will be done later investigating what behaviours students regard as sensitive and also in studies that compares different methods of interviewing and surveying participants. The data may also be presented at conferences or be published. The data will also be written up as part of a series of Honours, Masters and PhD dissertations by all the participating researchers.

### **How you are protected.**

It will not be possible to identify personal details of any participant so your participation and your responses will be entirely protected and confidential. This data will be entered into the database and stored electronically for 5 years after which it will be destroyed.

***You may withdraw at any time without any consequence.***

In the unlikely event that participation causes you any personal discomfort or distress, you may contact any of the researchers (listed below) for a referral to the counselling service of your College or to our School's Child and Family Centre. All these contact details are provided below.

If you have complaints or concerns about the study, you may contact the supervisor of the research, Vernon Solomon, ([Solomon@ukzn.ac.za](mailto:Solomon@ukzn.ac.za)), supervisor of Mr. Solomon's PhD, Prof. Kevin Durrheim ([durrheim@ukzn.ac.za](mailto:durrheim@ukzn.ac.za)) or the Chairperson of the UKZN Social Science research Ethics Committee through the secretary Ms. P. Ximba ([ximbap@ukzn.ac.za](mailto:ximbap@ukzn.ac.za)).

### **Consent**

By signing the consent form, you give your consent to participate in the study as described above and indicate that you have understood and agree to the conditions of participation. You also confirm by participation that you are over 18 years of age and legally entitled to give your informed consent to participate in this research.

**Thank you for your willingness to consider this and for your participation!**

### **Researchers:**

**Honours: Jenna-lee Phillip**

**Nadia Kikia**

**Masters: Hafsah Shaik**

### **Supervisors:**

**PhD: Vernon Solomon**

**PhD Kevin Durrheim**

### **Contact Details for concerns and questions:**

	<b><u>Researcher</u></b>	<b><u>Email Addresses</u></b>	<b><u>Cellphone Numbers</u></b>
<b>Honours:</b>	Nadia Kikia	<a href="mailto:211525944@stu.ukzn.ac.za">211525944@stu.ukzn.ac.za</a>	083 381 7864
	Jenna-lee Phillip	<a href="mailto:210548741@stu.ukzn.ac.za">210548741@stu.ukzn.ac.za</a>	083 276 4637
<b>Masters:</b>	Hafsah Shaik	<a href="mailto:hafsahshaik@yahoo.co.uk">hafsahshaik@yahoo.co.uk</a>	
<b>PhD &amp; Supervisor:</b>	Mr Vernon Solomon	<a href="mailto:Solomon@ukzn.ac.za">Solomon@ukzn.ac.za</a>	
<b>PhD Supervisor:</b>	Prof. Kevin Durrheim	<a href="mailto:durrheim@ukzn.ac.za">durrheim@ukzn.ac.za</a>	

## **Appendix 5 - Consent form**

### **Declaration of Consent**

I ..... (full names) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire. I understand that I may choose to give my contact details on a separate sheet in order to be entered into the lucky draw for a monetary prize.

Signature of Participant ..... Date.....

**Please complete the section on demographics:**

**Please tick the applicable block:**

**Age (please write):** \_\_\_\_\_

**Gender: Male:**  **Female:**

**Year of study at university: 1<sup>st</sup>**  **2<sup>nd</sup>**  **3<sup>rd</sup>**  **4<sup>th</sup> +**

**What population group/race would you describe yourself as?**

**Black**  **Coloured**  **Indian**  **White**  **Other**

**To what religion do you belong?**

**African (traditional)**  **Christian**  **Hinduism**

**Islamic**  **Judaism**  **Other (please specify):** \_\_\_\_\_

**Please rate your agreement/disagreement with the following statement concerning your commitment to your religion:**

*I am strongly committed to my religion.*

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

*Thank you for participation in this study.*

**INSTRUCTIONS:**

We ask you to complete the following questionnaire. As explained in the information sheet we are interested to know the following from you regarding each item in the list:

- How sensitive you think the items on the list are for you.
- If the item is true or false for you
- And if you would NOT want anyone to know about it.

By **sensitive** we mean that you see it as important that no one should know this about you, *IF it were true.*

Therefore *each item* requires that you tick *three response options* for it.

**For example:**

(Cross Three boxes)

<i>Item</i>	<i>1-These items are (for me):</i>		<i>2-These items are (for me):</i>		<i>3 - I would NOT want anyone to know the following about me, because it is so sensitive</i>			
<i>1. Eating Pizza</i>	<i>Sensitive</i>	<del><i>Non-Sensitive</i></del>	<del><i>True</i></del>	<i>False</i>	<i>Strongly Agree</i>	<i>Agree</i>	<del><i>Disagree</i></del>	<i>Strongly Disagree</i>

**Please make sure the options you select best represent your perception of:**

- **What is sensitive (rather than what you think friends/ others regard as sensitive)**
- **Whether the item applies to you**
- **And if you would NOT want anyone to know about it**

**Norming Study Questionnaire**

**Please complete the section on demographics:**

Age (please write): \_\_\_\_\_

**Please tick the applicable block:**

Gender: Male:  Female:

Year of study at university: 1<sup>st</sup>  2<sup>nd</sup>  3<sup>rd</sup>  4<sup>th</sup> +

**What population group/race would you describe yourself as?**

Black  Coloured  Indian  White  Other

To what religion do you belong?

African (traditional)  Christian  Hinduism

Islamic  Judaism  Other (please specify): \_\_\_\_\_

Please rate your agreement/disagreement with the following statement concerning your commitment to your religion:


*I am strongly committed to my religion.*

- 6. Strongly disagree
- 7. Disagree
- 8. Neither agree nor disagree
- 9. Agree
- 10. Strongly agree

For example:

(Cross Three boxes, 1 from each category)

Item	1-These items are (for me):		2-These items are (for me):		3 - I would NOT want anyone to know the following about me, because it is so sensitive			
1. Eating Pizza	Sensitive	<del>Non-Sensitive</del>	<del>True</del>	False	Strongly Agree	Agree	<del>Disagree</del>	Strongly Disagree

No.	Item	1		2		3			
<b>Choose 3 of these options (1 from each category)</b> 		Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Have had dental work done	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
2	Know where to buy condoms	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
3	Have more than one sibling	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
4	Have a favourite soccer team	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
5	Would consider myself a sports fan	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
6	Think one alcoholic drink a day is healthy	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
7	Have seen a doctor in the last year	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
8	Have been/ am in a sexual relationship in exchange for	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree




	things I need (e.g. food, transport, accommodation, fees).								
9	Visit the Library more than once a week	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
10	Have had sexual intercourse with someone who was too intoxicated to give consent.	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
11	Am on Facebook	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
12	Know where to get condoms for free	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
13	Know what's going on in SA politics	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
14	Know where to get the contraceptive pill	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
15	Often have had sex with my boyfriend/girlfriend because I feel that I have to	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
16	Am comfortable with my sexual desires	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
17	Have broken a limb	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
18	Have raped someone	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
19	Use the internet almost every week	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
20	Have hay fever	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

For example:

(Cross Three boxes, 1 from each category)

Item	1-These items are (for me):		2-These items are (for me):		3 - I would NOT want anyone to know the following about me, because it is so sensitive			
1. Eating Pizza	Sensitive	<del>Non-Sensitive</del>	<del>True</del>	<del>False</del>	Strongly Agree	Agree	<del>Disagree</del>	Strongly Disagree

No.	Item	1		2		3			
	<b>Choose 3 of these options (1 from each category)</b> 	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
21	Have an ipad or tablet	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
22	Like reading the editorial section of the local newspaper	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
23	Have a shoe size smaller than size 6	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
24	Work to earn money while I am studying full time	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
25	Always read before going to sleep	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
26	Am HIV positive	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

27	Always have sugar in tea or coffee	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
28	Can type reasonably well	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
29	Have gone to a traditional healer when sick	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
30	Have been slightly drunk	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
31	Am concerned about contracting a sexually transmitted disease	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
32	Exercise regularly	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
33	Have engaged in light petting (kissing, fondling)	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
34	Try to eat healthily	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
35	Have taken illegal drugs	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
36	Know the name of a Maritzburg United soccer player	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
37	Have been aware of sexual feelings between 10 and 12 years	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
38	Have engaged in heavy petting (including genital contact)	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
39	Have used a condom the last time I had sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
40	Know about the "morning after" pill	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

**For example:**

**(Cross Three boxes, 1 from each category)**

<i>Item</i>	<i>1-These items are (for me):</i>		<i>2-These items are (for me):</i>		<i>3 - I would NOT want anyone to know the following about me, because it is so sensitive</i>			
<b>1. Eating Pizza</b>	<i>Sensitive</i>	<del><i>Non-Sensitive</i></del>	<del><i>True</i></del>	<i>False</i>	<i>Strongly Agree</i>	<i>Agree</i>	<del><i>Disagree</i></del>	<i>Strongly Disagree</i>


No.	Item	<b>1</b>		<b>2</b>		<b>3</b>			
<b>Choose 3 of these options (1 from each category)</b>		Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
41	Have gone to the doctor when sick	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
42	Use the contraceptive pill	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
43	Have had more than one sexual partner in the last month	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
44	Know the name of the Kenyan president	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

45	Have raped someone together with one or more of my friends	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
46	Am waiting for the right partner before having sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
47	Won't go in a car with a driver who has been drinking	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
48	Sometimes smoke cigarettes	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
49	Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
50	Regret the first time I had sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
51	Have had a wound that needed stitches	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
52	Have experimented casually with various drugs	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
53	Have asthma	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
54	Am a vegetarian	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
55	Have one or more pets	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
56	Have had sex with a partner who was 10 or more years older than me at the time	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
57	Don't drink alcohol	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
58	Usually choose sugar free soft drinks	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
59	Have travelled outside South Africa	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
60	Use sms's more than email	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

**For example:**

**(Cross Three boxes, 1 from each category)**

Item	1-These items are (for me):		2-These items are (for me):		3 - I would NOT want anyone to know the following about me, because it is so sensitive			
1. Eating Pizza	Sensitive	<del>Non-Sensitive</del>	<del>True</del>	False	Strongly Agree	Agree	<del>Disagree</del>	Strongly Disagree


No.	Item	1		2		3			
<b>Choose 3 of these options (1 from each category)</b> 		Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
61	First had sex between the ages of 14 and 16	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
62	Had sex when I was emotionally ready	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
63	Had at least one parent who	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

	smoked cigarettes								
64	Am comfortable with casual sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
65	Am waiting till marriage to have sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
66	Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
67	Drink coffee	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
68	Have been in a car accident as a passenger	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
69	Have taken drugs intravenously (injectable)	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
70	Have sinus problems	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
71	Am careful with my diet	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
72	Have been to London	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
73	Live alone	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
74	Have my driver's license	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
75	Like documentaries	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
76	Went to a government high school	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
77	Have had sex with someone who wasn't my regular partner	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
78	Have a brother	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
79	Think alcohol should be illegal	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
80	Have been tested for HIV	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

**For example:**

**(Cross Three boxes, 1 from each category)**

Item	1-These items are (for me):		2-These items are (for me):		3 - I would NOT want anyone to know the following about me, because it is so sensitive			
1. Eating Pizza	Sensitive	<del>Non-Sensitive</del>	<del>True</del>	False	Strongly Agree	Agree	<del>Disagree</del>	Strongly Disagree


No.	Item	1		2		3			
	<b>Choose 3 of these options (1 from each category)</b> 	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
81	Have gone to the chemist when sick	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
82	Am at risk for HIV	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
83	Support legalising drugs	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

84	Think sex is ok in a committed relationship	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
85	Live in shared accommodation	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
86	Know my HIV status	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
87	Often watch television late at night	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
88	Have often drunk alcohol	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
89	Don't mix with people who drink alcohol	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
90	Would consider myself a fan of pop music	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
91	Have seen a dentist in the last two years	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
92	Smoke cigarettes in social situations	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
93	Have more than one sister	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
94	Had sex when I was younger than 14	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
95	Always use condoms when having sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
96	Have watched the movie "Tsotsi"	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
97	Am entitled to have my partner pay for things for me	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
98	Never exercise	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
99	Never drink fizzy drinks	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
100	Own at least one cell phone	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

For example:

(Cross Three boxes, 1 from each category)

Item	1-These items are (for me):		2-These items are (for me):		3 - I would NOT want anyone to know the following about me, because it is so sensitive			
1. Eating Pizza	Sensitive	<del>Non-Sensitive</del>	<del>True</del>	False	Strongly Agree	Agree	<del>Disagree</del>	Strongly Disagree


No.	Item	1		2		3			
<b>Choose 3 of these options (1 from each category)</b> 		Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
101	Don't drive when I have been drinking	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
102	Have an internet connection at home	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
103	Watch the news on TV at	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

	least 3 times a week								
104	Reading is a hobby	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
105	Think smoking cigarettes is more harmful than smoking dagga	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
106	Regularly get health check-ups	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
107	Don't normally eat breakfast	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
108	Know what a "conversion" is in rugby	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
109	Have a favourite TV show	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
110	Have a dog as a pet	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
111	Have my own vehicle	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
112	Have seen any kind of health practitioner in the last year	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
113	Can speak more than 2 languages reasonably well	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
114	Have had diagnostic tests done in the last year	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
115	Went to a private high school	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
116	Subscribe to electronic newsletters	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
117	Have had sex after drinking	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
118	Have not had sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
119	Have had more than two sexual partners in the last three months	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
120	Have gone to a local clinic when sick	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

For example:

(Cross Three boxes, 1 from each category)

Item	1-These items are (for me):		2-These items are (for me):		3 - I would NOT want anyone to know the following about me, because it is so sensitive			
1. Eating Pizza	Sensitive	<del>Non-Sensitive</del>	<del>True</del>	False	Strongly Agree	Agree	<del>Disagree</del>	Strongly Disagree

No.	Item	1		2		3			
	<b>Choose 3 of these options (1 from each category)</b> 	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
121	Have taken antibiotics in the last year	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
122	Take vitamins almost	Sensitive	Non-	True	False	Strongly	Agree	Disagree	Strongly


	everyday		sensitive			Agree			Disagree
123	There's a handgun in my house	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
124	Only use condoms with a new partner	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
125	Have lived outside of South Africa	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
126	Am sexually active	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
127	Have refused to use a condom	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
128	Have never been in hospital	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
129	Have watched the movie "Jerusalem"	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
130	Had sex the first time with someone when I did not really feel like doing it	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
131	Have had sex with someone who isn't a regular partner because I've needed material things (e.g. rent, food, cosmetics).	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
132	Have weekend/after hours work for money	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
133	Had asthma as a child	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
134	Have felt peer pressure to drink alcohol.	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
135	Can drive quite well after two drinks	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
136	Regularly post items on Facebook	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
137	Have been forced to have sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
138	Have had to slap, kick or bite to stop someone having sex with me	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
139	Have engaged in sexual intercourse while under the influence of alcohol that I later regretted.	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
140	Regret having had sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

**For example:**

**(Cross Three boxes, 1 from each category)**

<i>Item</i>	<i>1-These items are (for me):</i>		<i>2-These items are (for me):</i>		<i>3 - I would NOT want anyone to know the following about me, because it is so sensitive</i>			
<b>1. Eating Pizza</b>	<b>Sensitive</b>	<del><b>Non-Sensitive</b></del>	<del><b>True</b></del>	<b>False</b>	<b>Strongly Agree</b>	<b>Agree</b>	<del><b>Disagree</b></del>	<b>Strongly Disagree</b>




No.	Item	1		2		3			
	<b>Choose 3 of these options (1 from each category)</b> 	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
141	Have lived in at least three different provinces	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
142	Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
143	Don't mix with people who use drugs	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
144	Am careful about risky sex	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
145	Have a student loan from a bank	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
146	Have tried to get someone else intoxicated in the hopes of having sexual intercourse with them.	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
147	Am comfortable receiving gifts from my sexual partner	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
148	Have been sexually active but not had intercourse (vaginal or anal)	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
149	Have been coerced or forced to have sexual intercourse by someone who was under the influence of alcohol.	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
150	Am a virgin	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
151	Sometimes drink alcohol socially	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
152	Have been pressurised to have sex without a condom	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
153	Have been to Durban	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
154	Drink tea	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
155	Drink alcohol in moderation	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
156	Have forced someone to have sex with me	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
157	Have had sexual intercourse when so under the influence of alcohol that I was unable to consent.	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
158	Felt ready when I had sex the first time	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
159	Own a laptop computer	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
160	Have had sex with a teacher or lecturer	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

**For example:**



(Cross Three boxes, 1 from each category)

Item	1-These items are (for me):		2-These items are (for me):		3 - I would NOT want anyone to know the following about me, because it is so sensitive			
1. Eating Pizza	Sensitive	<del>Non-Sensitive</del>	<del>True</del>	False	Strongly Agree	Agree	<del>Disagree</del>	Strongly Disagree


No.	Item	1		2		3			
<b>Choose 3 of these options (1 from each category)</b> 		Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
161	Have been in an accident as driver (car/motorcycle/bicycle)	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
162	Have blacked out from drinking too much alcohol	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
163	Smoke dagga occasionally	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
164	Have drunk alcohol	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
165	Have allergies	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
166	Have a shoe size over 7	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
167	Have had sex with someone when I was so drunk that I do not remember it	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
168	Often watch television late at night	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
169	First had sex between the ages of 14 and 18	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
170	Have had sexual intercourse without a condom being used while under the influence of alcohol.	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
171	Know the name of the premier of KwaZulu-Natal	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
172	Have a cat as a pet	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
173	Had the usual childhood illnesses	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
174	Live with my family	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
175	Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
176	Am careful about what I put into my body	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
177	Have had sex with someone who was in an authority position in relation to me	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

178	Use the internet from my cellphone	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
179	Have watched the movie "Argo"	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
180	Have consumed alcohol until intoxicated/drunk	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

**For example:**

**(Cross Three boxes, 1 from each category)**

Item	1-These items are (for me):		2-These items are (for me):		3 - I would NOT want anyone to know the following about me, because it is so sensitive			
1. Eating Pizza	Sensitive	<del>Non-Sensitive</del>	<del>True</del>	False	Strongly Agree	Agree	<del>Disagree</del>	Strongly Disagree

No.	Item	1		2		3			
<b>Choose 3 of these options (1 from each category)</b> 		Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
181	Dagga is not harmful	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
182	Read the local paper almost everyday	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
183	Became aware of sexual feelings from 13 years onwards	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
184	Have read the book "Lord of the files"	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
185	Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree
186	Look after my body	Sensitive	Non-sensitive	True	False	Strongly Agree	Agree	Disagree	Strongly Disagree

**Thank you for your patience, please rate the following statements based on your level of agreement with each of the statements.**

**Social Desirability Scale**

<b>1. Strongly Agree</b>	<b>2. Agree</b>	<b>3. Disagree</b>	<b>4. Strongly Disagree</b>
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**(cross the appropriate box)**

No.	Item	Scale			
1.	I sometimes feel resentful when I don't get my way.	1	2	3	4
2.	On a few occasions, I have given up doing something because I thought too little of my ability.	1	2	3	4

3.	There have been times when I felt like rebelling against people in authority even though I knew they were right.	1	2	3	4
4.	No matter who I'm talking to, I'm always a good listener.	1	2	3	4
5.	I can remember "playing sick" to get out of something.	1	2	3	4
6.	There have been occasions when I took advantage of someone.	1	2	3	4
7.	I'm always willing to admit it when I make a mistake.	1	2	3	4
8.	I sometimes try to get even rather than forgive and forget.	1	2	3	4
9.	I am always courteous (polite), even to people who are disagreeable (unpleasant).	1	2	3	4
10.	I have never been irked (irritated) when people expressed ideas very different from my own.	1	2	3	4
11.	There have times when I was quite jealous of the good fortune of others.	1	2	3	4
12.	I am sometimes irritated by people who ask favours of me.	1	2	3	4
13.	I have never deliberately said something that hurt someone's feelings.	1	2	3	4

**Thank you for your participation!**

## Appendix 7 – Letter from CFC



2014 March 12

### **To whom it may concern**

This letter serves to provide the assurance that should any interviewee require psychological assistance as a result of any distress arising from the approved research process for a study on ....it will be provided by psychologists and intern psychologists at the UKZN Child and Family Centre. This project is conducted by a research team of Honours and

Masters' students at the School of Applied Human Sciences, University of KwaZulu-Natal Pietermaritzburg campus.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'N. Buthelezi', enclosed in a thin black rectangular border.

Nontobeko Buthelezi  
Child and Family Centre Director



## Appendix 8 – SHREC Approval

20 May 2015

Ms Hafsa Shaik 209504814  
School of Applied Human Sciences  
Pietermaritzburg Campus

Dear Ms Shaik

Protocol reference number: HSS/0040/015M

Project title: Norming and scaling sensitive behaviour in a student population at the University of KwaZulu-Natal

### Full Approval – Full Committee Reviewed

In response to your application received on 22 January 2015, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

**PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.**

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

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

Yours faithfully

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

/px

cc Supervisor: Mr Vernon Solomon  
cc Academic Leader Research: Professor D McCracken  
cc School Administrator: Mr Sbonelo Duma

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### Humanities & Social Sciences Research Ethics Committee

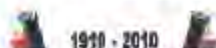
Dr Shonuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/83504557 Facsimile: +27 (0) 31 260 4809 Email: [yimbiso@ukzn.ac.za](mailto:yimbiso@ukzn.ac.za) / [svrmantra@ukzn.ac.za](mailto:svrmantra@ukzn.ac.za) / [mohunoi@ukzn.ac.za](mailto:mohunoi@ukzn.ac.za)

Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)



100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

17 October 2014

Ms Hafsa Shaik  
School of Applied Human Sciences  
College of Humanities  
Pietermaritzburg Campus  
UKZN  
Email: [209504814@stu.ukzn.ac.za](mailto:209504814@stu.ukzn.ac.za)  
[Solomon@ukzn.ac.za](mailto:Solomon@ukzn.ac.za)

Dear Ms Shaik

**RE: PERMISSION TO CONDUCT RESEARCH**

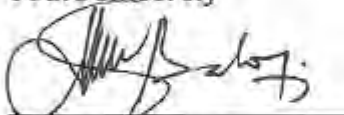
Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN) towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

*"Norming and scaling sensitive behaviour in a student population at the University of KwaZulu-Natal".*

It is noted that you will be constituting your sample by randomly handing out questionnaires to students inviting them to participate in the study on the Pietermaritzburg Campus.

Data collected must be treated with due confidentiality and anonymity.

Yours sincerely



**MR MC BALOYI**  
**REGISTRAR**



---

**Office of the Registrar**

Postal Address: Private Bag X54001, Durban, South Africa

Telephone: +27 (0) 31 260 8005/2206 Facsimile: +27 (0) 31 260 7824/2204 Email: [registrar@ukzn.ac.za](mailto:registrar@ukzn.ac.za)

Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)

 1910 - 2010   
100 YEARS OF ACADEMIC EXCELLENCE

## Appendix 10 – Current Norming Study Factor Loadings

<b>Appendix: Norming Option - Descriptive Statistics</b>			
	Mean	Std. Deviation	Analysis N
Have had dental work done	1.76	.433	314
Know where to buy condoms	1.62	.492	314
Have more than one sibling	1.72	.464	314
Have a favourite soccer team	1.74	.454	314
Would consider myself a sports fan	1.80	.414	314
Think one alcoholic drink a day is healthy	1.80	.417	314
Have seen a doctor in the last year	1.67	.498	314
Have been/ am in a sexual relationship in exchange for things I need (e.g. food, transport, accommodation, fees).	1.67	.479	314
Visit the Library more than once a week	1.80	.411	314
Have had sexual intercourse with someone who was too intoxicated to give consent.	1.64	.487	314
Am on Facebook	1.71	.461	314
Know where to get condoms for free	1.63	.490	314
Know what's going on in SA politics	1.78	.424	314
Know where to get the contraceptive pill	1.62	.500	314
Often have had sex with my boyfriend/girlfriend because I feel that I have to	1.52	.519	314
Am comfortable with my	1.51	.507	314



sexual desires			
Have broken a limb	1.85	.383	314
Have raped someone	1.77	.421	314
Use the internet almost every week	1.74	.440	314
Have hay fever	1.83	.413	314
Have an ipad or tablet	1.86	.348	314
Like reading the editorial section of the local newspaper	1.82	.400	314
Have a shoe size smaller than size 6	1.76	.433	314
Work to earn money while I am studying full time	1.86	.360	314
Always read before going to sleep	1.78	.432	314
Am HIV positive	1.63	.496	314
Always have sugar in tea or coffee	1.75	.444	314
Can type reasonably well	1.73	.445	314
Have gone to a traditional healer when sick	1.70	.457	314
Have been slightly drunk	1.69	.463	314
Am concerned about contracting a sexually transmitted disease	1.56	.497	314
Exercise regularly	1.79	.418	314
Have engaged in light petting (kissing, fondling)	1.60	.497	314
Try to eat healthily	1.72	.457	314
Have taken illegal drugs	1.66	.475	314
Know the name of a Maritzburg United soccer player	1.85	.369	314
Have been aware of sexual feelings between 10 and 12 years	1.61	.490	314
Have engaged in heavy petting (including genital contact)	1.51	.501	314
Have used a condom the last time I had sex	1.55	.505	314



Know about the "morning after" pill	1.58	.513	314
Have gone to the doctor when sick	1.72	.465	314
Use the contraceptive pill	1.70	.472	314
Have had more than one sexual partner in the last month	1.58	.501	314
Know the name of the Kenyan president	1.86	.351	314
Have raped someone together with one or more of my friends	1.70	.460	314
Am waiting for the right partner before having sex	1.64	.494	314
Won't go in a car with a driver who has been drinking	1.70	.467	314
Sometimes smoke cigarettes	1.79	.414	314
Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).	1.69	.468	314
Regret the first time I had sex	1.50	.513	314
Have had a wound that needed stitches	1.85	.369	314
Have experimented casually with various drugs	1.70	.472	314
Have asthma	1.85	.369	314
Am a vegetarian	1.93	.256	314
Have one or more pets	1.88	.323	314
Have had sex with a partner who was 10 or more years older than me at the time	1.68	.476	314
Don't drink alcohol	1.78	.417	314
Usually choose sugar free soft drinks	1.85	.354	314
Have travelled outside	1.86	.351	314

South Africa			
Use sms's more than email	1.78	.415	314
First had sex between the ages of 14 and 16	1.64	.486	314
Had sex when I was emotionally ready	1.57	.509	314
Had at least one parent who smoked cigarettes	1.75	.447	314
Am comfortable with casual sex	1.61	.508	314
Am waiting till marriage to have sex	1.67	.470	314
Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	1.63	.484	314
Drink coffee	1.76	.429	314
Have been in a car accident as a passenger	1.85	.354	314
Have taken drugs intravenously (injectable)	1.77	.423	314
Have sinus problems	1.83	.375	314
Am careful with my diet	1.76	.425	314
Have been to London	1.90	.303	314
Live alone	1.86	.348	314
Have my driver's license	1.90	.294	314
Like documentaries	1.84	.363	314
Went to a government high school	1.76	.433	314
Have had sex with someone who wasn't my regular partner	1.56	.504	314
Have a brother	1.78	.417	314
Think alcohol should be illegal	1.79	.410	314
Have been tested for HIV	1.61	.490	314
Have gone to the chemist when sick	1.75	.444	314
Am at risk for HIV	1.60	.492	314
Support legalising drugs	1.82	.386	314

Think sex is ok in a committed relationship	1.65	.478	314
Live in shared accommodation	1.80	.417	314
Know my HIV status	1.58	.495	314
Often watch television late at night	1.80	.409	314
Have often drunk alcohol	1.77	.419	314
Don't mix with people who drink alcohol	1.84	.372	314
Would consider myself a fan of pop music	1.85	.357	314
Have seen a dentist in the last two years	1.83	.372	314
Smoke cigarettes in social situations	1.83	.389	314
Have more than one sister	1.79	.406	314
Had sex when I was younger than 14	1.71	.461	314
Always use condoms when having sex	1.65	.492	314
Have watched the movie "Tsotsi"	1.76	.427	314
Am entitled to have my partner pay for things for me	1.80	.409	314
Never exercise	1.82	.397	314
Never drink fizzy drinks	1.87	.356	314
Own at least one cell phone	1.79	.416	314
Don't drive when I have been drinking	1.73	.458	314
Have an internet connection at home	1.87	.334	314
Watch the news on TV at least 3 times a week	1.87	.341	314
Reading is a hobby	1.84	.363	314
Think smoking cigarettes is more harmful than smoking dagga	1.81	.394	314
Regularly get health check-ups	1.81	.404	314

Don't normally eat breakfast	1.80	.403	314
Know what a "conversion" is in rugby	1.86	.348	314
Have a favourite TV show	1.80	.411	314
Have a dog as a pet	1.87	.334	314
Have my own vehicle	1.90	.319	314
Have seen any kind of health practitioner in the last year	1.82	.389	314
Can speak more than 2 languages reasonably well	1.77	.421	314
Have had diagnostic tests done in the last year	1.82	.386	314
Went to a private high school	1.87	.334	314
Subscribe to electronic newsletters	1.89	.319	314
Have had sex after drinking	1.61	.500	314
Have not had sex	1.72	.451	314
Have had more than two sexual partners in the last three months	1.64	.486	314
Have gone to a local clinic when sick	1.74	.442	314
Have taken antibiotics in the last year	1.75	.438	314
Take vitamins almost everyday	1.83	.384	314
There's a handgun in my house	1.76	.434	314
Only use condoms with a new partner	1.70	.479	314
Have lived outside of South Africa	1.90	.305	314
Am sexually active	1.61	.488	314
Have refused to use a condom	1.64	.486	314
Have never been in hospital	1.81	.412	314

Have watched the movie "Jeruselema"	1.79	.408	314
Had sex the first time with someone when I did not really feel like doing it	1.58	.500	314
Have had sex with someone who isn't a regular partner because I've needed material things (e.g. rent, food, cosmetics).	1.66	.481	314
Have weekend/after hours work for money	1.87	.356	314
Had asthma as a child	1.89	.325	314
Have felt peer pressure to drink alcohol.	1.72	.458	314
Can drive quite well after two drinks	1.87	.350	314
Regularly post items on Facebook	1.81	.394	314
Have been forced to have sex	1.69	.471	314
Have had to slap, kick or bite to stop someone having sex with me	1.65	.483	314
Have engaged in sexual intercourse while under the influence of alcohol that I later regretted.	1.62	.485	314
Regret having had sex	1.57	.502	314
Have lived in at least three different provinces	1.90	.303	314
Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	1.67	.484	314
Don't mix with people who use drugs	1.78	.420	314
Am careful about risky sex	1.61	.494	314
Have a student loan from a bank	1.83	.381	314
Have tried to get someone	1.70	.464	314

else intoxicated in the hopes of having sexual intercourse with them.			
Am comfortable receiving gifts from my sexual partner	1.70	.471	314
Have been sexually active but not had intercourse (vaginal or anal)	1.64	.494	314
Have been coerced or forced to have sexual intercourse by someone who was under the influence of alcohol.	1.68	.473	314
Am a virgin	1.68	.469	314
Sometimes drink alcohol socially	1.79	.433	314
Have been pressurised to have sex without a condom	1.64	.499	314
Have been to Durban	1.78	.413	314
Drink tea	1.78	.415	314
Drink alcohol in moderation	1.84	.378	314
Have forced someone to have sex with me	1.78	.420	314
Have had sexual intercourse when so under the influence of alcohol that I was unable to consent.	1.64	.481	314
Felt ready when I had sex the first time	1.61	.496	314
Own a laptop computer	1.79	.414	314
Have had sex with a teacher or lecturer	1.75	.433	314
Have been in an accident as driver (car/motorcycle/bicycle)	1.88	.323	314
Have blacked out from drinking too much alcohol	1.78	.415	314
Smoke dagga occasionally	1.78	.417	314

Have drunk alcohol	1.72	.451	314
Have allergies	1.82	.383	314
Have a shoe size over 7	1.86	.351	314
Have had sex with someone when I was so drunk that I do not remember it	1.68	.481	314
Often watch television late at night	1.82	.394	314
First had sex between the ages of 14 and 18	1.68	.472	314
Have had sexual intercourse without a condom being used while under the influence of alcohol.	1.63	.504	314
Know the name of the premier of KwaZulu-Natal	1.81	.402	314
Have a cat as a pet	1.90	.323	314
Had the usual childhood illnesses	1.81	.407	314
Live with my family	1.83	.375	314
Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).	1.75	.435	314
Am careful about what I put into my body	1.75	.444	314
Have had sex with someone who was in an authority position in relation to me	1.71	.463	314
Use the internet from my cellphone	1.77	.419	314
Have watched the movie "Argo"	1.92	.276	314
Have consumed alcohol until intoxicated/drunk	1.73	.451	314
Dagga is not harmful	1.84	.369	314
Read the local paper almost everyday	1.87	.343	314
Became aware of sexual	1.68	.469	314

feelings from 13 years onwards			
Have read the book "Lord of the files"	1.90	.303	314
Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.	1.77	.438	314
Look after my body	1.73	.461	314

## Component Loadings

Component Loadings		
	Dimension	
	1	2
Have had dental work done	.476	-.240
Know where to buy condoms	.503	-.087
Have more than one sibling	.467	-.359
Have a favourite soccer team	.484	-.364
Would consider myself a sports fan	.507	-.298
Think one alcoholic drink a day is healthy	.433	.038
Have seen a doctor in the last year	.553	-.191
<b>Have been/ am in a sexual relationship in exchange for things I need (e.g. food, transport, accommodation, fees).</b>	<b>.262</b>	<b>.521</b>
Visit the Library more than once a week	.565	-.293
<b>Have had sexual intercourse with someone who was too intoxicated to give consent.</b>	<b>.226</b>	<b>.607</b>
Am on Facebook	.676	-.444
Know where to get condoms	.621	-.156



for free		
Know what's going on in SA politics	.562	-.299
Know where to get the contraceptive pill	.566	-.048
<b>Often have had sex with my boyfriend/girlfriend because I feel that I have to</b>	<b>.288</b>	<b>.448</b>
Am comfortable with my sexual desires	.382	.167
Have broken a limb	.482	.053
<b>Have raped someone</b>	<b>.347</b>	<b>.541</b>
Use the internet almost every week	.634	-.433
Have hay fever	.484	.047
Have an ipad or tablet	.539	-.069
Like reading the editorial section of the local newspaper	.519	-.184
Have a shoe size smaller than size 6	.596	-.257
Work to earn money while I am studying full time	.519	-.070
Always read before going to sleep	.586	-.285
<b>Am HIV positive</b>	<b>.269</b>	<b>.608</b>
Always have sugar in tea or coffee	.625	-.485
Can type reasonably well	.690	-.416
Have gone to a traditional healer when sick	.503	.124
Have been slightly drunk	.525	.016
Am concerned about contracting a sexually transmitted disease	.528	.058
Exercise regularly	.594	-.301
Have engaged in light petting (kissing, fondling)	.493	.031
Try to eat healthily	.591	-.332
<b>Have taken illegal drugs</b>	<b>.353</b>	<b>.428</b>
Know the name of a	.583	-.190

Maritzburg United soccer player		
Have been aware of sexual feelings between 10 and 12 years	.513	.240
<b>Have engaged in heavy petting (including genital contact)</b>	<b>.192</b>	<b>.377</b>
Have used a condom the last time I had sex	.384	.256
Know about the "morning after" pill	.479	.029
Have gone to the doctor when sick	.647	-.367
Use the contraceptive pill	.444	.285
<b>Have had more than one sexual partner in the last month</b>	<b>.323</b>	<b>.526</b>
Know the name of the Kenyan president	.507	-.042
<b>Have raped someone together with one or more of my friends</b>	<b>.379</b>	<b>.546</b>
Am waiting for the right partner before having sex	.395	.239
Won't go in a car with a driver who has been drinking	.578	-.222
Sometimes smoke cigarettes	.468	.110
<b>Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).</b>	<b>.387</b>	<b>.577</b>
<b>Regret the first time I had sex</b>	<b>.441</b>	<b>.309</b>
Have had a wound that needed stitches	.503	.040
<b>Have experimented casually with various drugs</b>	<b>.353</b>	<b>.430</b>
Have asthma	.499	.181
Am a vegetarian	.624	-.043
Have one or more pets	.597	-.039
<b>Have had sex with a partner</b>	<b>.447</b>	<b>.553</b>

<b>who was 10 or more years older than me at the time</b>		
Don't drink alcohol	.538	-.191
Usually choose sugar free soft drinks	.612	-.154
Have travelled outside South Africa	.585	-.117
Use sms's more than email	.653	-.380
<b>First had sex between the ages of 14 and 16</b>	<b>.388</b>	<b>.501</b>
Had sex when I was emotionally ready	.421	.385
Had at least one parent who smoked cigarettes	.445	.196
Am comfortable with casual sex	.455	.429
Am waiting till marriage to have sex	.418	.251
<b>Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)</b>	<b>.341</b>	<b>.621</b>
Drink coffee	.662	-.479
Have been in a car accident as a passenger	.542	-.013
<b>Have taken drugs intravenously (injectable)</b>	<b>.366</b>	<b>.422</b>
Have sinus problems	.590	-.148
Am careful with my diet	.513	-.099
Have been to London	.612	-.051
Live alone	.621	-.178
Have my driver's license	.591	-.109
Like documentaries	.612	-.211
Went to a government high school	.637	-.393
<b>Have had sex with someone who wasn't my regular partner</b>	<b>.393</b>	<b>.511</b>
Have a brother	.671	-.396
Think alcohol should be illegal	.551	-.167

Have been tested for HIV	.634	-.005
Have gone to the chemist when sick	.644	-.354
Am at risk for HIV	.465	.435
Support legalising drugs	.450	.255
Think sex is ok in a committed relationship	.686	.017
Live in shared accommodation	.632	-.243
Know my HIV status	.615	.012
Often watch television late at night	.681	-.264
Have often drunk alcohol	.566	.061
Don't mix with people who drink alcohol	.521	-.122
Would consider myself a fan of pop music	.631	-.231
Have seen a dentist in the last two years	.571	-.065
Smoke cigarettes in social situations	.533	.176
Have more than one sister	.622	-.352
<b>Had sex when I was younger than 14</b>	<b>.424</b>	<b>.556</b>
Always use condoms when having sex	.482	.267
Have watched the movie "Tsotsi"	.676	-.493
Am entitled to have my partner pay for things for me	.602	.094
Never exercise	.570	.030
Never drink fizzy drinks	.582	-.108
Own at least one cell phone	.644	-.427
Don't drive when I have been drinking	.605	-.084
Have an internet connection at home	.613	-.164
Watch the news on TV at least 3 times a week	.608	-.224
Reading is a hobby	.602	-.204
Think smoking cigarettes is	.636	-.148

more harmful than smoking dagga		
Regularly get health check-ups	.655	-.080
Don't normally eat breakfast	.624	-.261
Know what a "conversion" is in rugby	.625	-.090
Have a favourite TV show	.635	-.447
Have a dog as a pet	.622	-.154
Have my own vehicle	.515	.074
Have seen any kind of health practitioner in the last year	.653	-.151
Can speak more than 2 languages reasonably well	.649	-.389
Have had diagnostic tests done in the last year	.563	.097
Went to a private high school	.597	-.064
Subscribe to electronic newsletters	.589	-.201
Have had sex after drinking	.512	.433
Have not had sex	.420	.211
<b>Have had more than two sexual partners in the last three months</b>	<b>.353</b>	<b>.507</b>
Have gone to a local clinic when sick	.626	-.288
Have taken antibiotics in the last year	.619	-.145
Take vitamins almost everyday	.525	-.032
There's a handgun in my house	.387	.361
Only use condoms with a new partner	.506	.386
Have lived outside of South Africa	.589	.022
Am sexually active	.523	.292
<b>Have refused to use a condom</b>	<b>.386</b>	<b>.480</b>
Have never been in hospital	.570	-.103
Have watched the movie	.611	-.453

“Jerusalem”		
<b>Had sex the first time with someone when I did not really feel like doing it</b>	<b>.391</b>	<b>.569</b>
<b>Have had sex with someone who isn’t a regular partner because I’ve needed material things (e.g. rent, food, cosmetics).</b>	<b>.344</b>	<b>.633</b>
Have weekend/after hours work for money	.576	-.006
Had asthma as a child	.534	.002
Have felt peer pressure to drink alcohol.	.395	.232
Can drive quite well after two drinks	.511	.133
Regularly post items on Facebook	.618	-.330
<b>Have been forced to have sex</b>	<b>.376</b>	<b>.555</b>
<b>Have had to slap, kick or bite to stop someone having sex with me</b>	<b>.396</b>	<b>.540</b>
<b>Have engaged in sexual intercourse while under the influence of alcohol that I later regretted.</b>	<b>.402</b>	<b>.601</b>
<b>Regret having had sex</b>	<b>.380</b>	<b>.507</b>
Have lived in at least three different provinces	.605	-.089
<b>Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection</b>	<b>.397</b>	<b>.610</b>
Don’t mix with people who use drugs	.519	-.018
Am careful about risky sex	.593	.121
Have a student loan from a bank	.490	.206
<b>Have tried to get someone else intoxicated in the</b>	<b>.366</b>	<b>.587</b>

<b>hopes of having sexual intercourse with them.</b>		
Am comfortable receiving gifts from my sexual partner	.569	.189
Have been sexually active but not had intercourse (vaginal or anal)	.467	.377
<b>Have been coerced or forced to have sexual intercourse by someone who was under the influence of alcohol.</b>	<b>.410</b>	<b>.609</b>
Am a virgin	.401	.293
Sometimes drink alcohol socially	.519	.110
<b>Have been pressurised to have sex without a condom</b>	<b>.407</b>	<b>.482</b>
Have been to Durban	.634	-.474
Drink tea	.656	-.502
Drink alcohol in moderation	.564	.037
<b>Have forced someone to have sex with me</b>	<b>.462</b>	<b>.506</b>
<b>Have had sexual intercourse when so under the influence of alcohol that I was unable to consent.</b>	<b>.354</b>	<b>.667</b>
Felt ready when I had sex the first time	.433	.400
Own a laptop computer	.612	-.309
<b>Have had sex with a teacher or lecturer</b>	<b>.424</b>	<b>.601</b>
Have been in an accident as driver (car/motorcycle/bicycle)	.530	.016
Have blacked out from drinking too much alcohol	.466	.346
Smoke dagga occasionally	.420	.357
Have drunk alcohol	.507	.032
Have allergies	.542	-.167
Have a shoe size over 7	.534	.052
<b>Have had sex with</b>	<b>.357</b>	<b>.587</b>

<b>someone when I was so drunk that I do not remember it</b>		
Often watch television late at night	.582	-.305
First had sex between the ages of 14 and 18	.549	.364
<b>Have had sexual intercourse without a condom being used while under the influence of alcohol.</b>	<b>.358</b>	<b>.562</b>
Know the name of the premier of KwaZulu-Natal	.568	-.255
Have a cat as a pet	.565	-.096
Had the usual childhood illnesses	.571	-.132
Live with my family	.596	-.339
<b>Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).</b>	<b>.373</b>	<b>.514</b>
Am careful about what I put into my body	.571	-.249
<b>Have had sex with someone who was in an authority position in relation to me</b>	<b>.418</b>	<b>.553</b>
Use the internet from my cellphone	.645	-.388
Have watched the movie "Argo"	.570	-.047
Have consumed alcohol until intoxicated/drunk	.514	.203
Dagga is not harmful	.546	.134
Read the local paper almost everyday	.517	-.098
Became aware of sexual feelings from 13 years onwards	.575	.207
Have read the book "Lord of the files"	.595	-.141



<b>Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.</b>	<b>.448</b>	<b>.531</b>
Look after my body	.611	-.340

<b>Sensitivity - Descriptive Statistics</b>			
	Mean	Std. Deviation	Analysis N
Have had dental work done	1.88	.333	314
Know where to buy condoms	1.78	.417	314
Have more than one sibling	1.94	.245	314
Have a favourite soccer team	1.95	.214	314
Would consider myself a sports fan	1.96	.200	314
Think one alcoholic drink a day is healthy	1.87	.347	314
Have seen a doctor in the last year	1.82	.400	314
Have been/ am in a sexual relationship in exchange for things I need (e.g. food, transport, accommodation, fees).	1.59	.493	314
Visit the Library more than once a week	1.93	.256	314
Have had sexual intercourse with someone who was too intoxicated to give consent.	1.54	.505	314
Am on Facebook	1.91	.292	314
Know where to get condoms for free	1.83	.384	314
Know what's going on in SA politics	1.91	.292	314
Know where to get the contraceptive pill	1.77	.429	314

Often have had sex with my boyfriend/girlfriend because I feel that I have to	1.48	.507	314
Am comfortable with my sexual desires	1.53	.506	314
Have broken a limb	1.88	.330	314
Have raped someone	1.61	.489	314
Use the internet almost every week	1.91	.301	314
Have hay fever	1.86	.383	314
Have an ipad or tablet	1.94	.252	314
Like reading the editorial section of the local newspaper	1.95	.214	314
Have a shoe size smaller than size 6	1.89	.319	314
Work to earn money while I am studying full time	1.91	.285	314
Always read before going to sleep	1.90	.305	314
Am HIV positive	1.53	.500	314
Always have sugar in tea or coffee	1.92	.283	314
Can type reasonably well	1.92	.271	314
Have gone to a traditional healer when sick	1.75	.435	314
Have been slightly drunk	1.82	.386	314
Am concerned about contracting a sexually transmitted disease	1.60	.492	314
Exercise regularly	1.89	.307	314
Have engaged in light petting (kissing, fondling)	1.67	.479	314
Try to eat healthily	1.86	.351	314
Have taken illegal drugs	1.63	.483	314
Know the name of a Maritzburg United soccer player	1.95	.227	314
Have been aware of sexual feelings between 10 and 12 years	1.63	.483	314

Have engaged in heavy petting (including genital contact)	1.48	.501	314
Have used a condom the last time I had sex	1.52	.513	314
Know about the "morning after" pill	1.68	.473	314
Have gone to the doctor when sick	1.85	.360	314
Use the contraceptive pill	1.64	.499	314
Have had more than one sexual partner in the last month	1.53	.500	314
Know the name of the Kenyan president	1.92	.276	314
Have raped someone together with one or more of my friends	1.64	.482	314
Am waiting for the right partner before having sex	1.63	.483	314
Won't go in a car with a driver who has been drinking	1.81	.394	314
Sometimes smoke cigarettes	1.82	.394	314
Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).	1.60	.490	314
Regret the first time I had sex	1.50	.513	314
Have had a wound that needed stitches	1.87	.341	314
Have experimented casually with various drugs	1.68	.472	314
Have asthma	1.84	.369	314
Am a vegetarian	1.92	.278	314
Have one or more pets	1.91	.292	314
Have had sex with a partner who was 10 or more years older than me at the time	1.63	.491	314

Don't drink alcohol	1.88	.336	314
Usually choose sugar free soft drinks	1.92	.283	314
Have travelled outside South Africa	1.93	.273	314
Use sms's more than email	1.91	.296	314
First had sex between the ages of 14 and 16	1.58	.507	314
Had sex when I was emotionally ready	1.54	.505	314
Had at least one parent who smoked cigarettes	1.79	.410	314
Am comfortable with casual sex	1.61	.500	314
Am waiting till marriage to have sex	1.67	.471	314
Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	1.58	.495	314
Drink coffee	1.89	.329	314
Have been in a car accident as a passenger	1.85	.369	314
Have taken drugs intravenously (injectable)	1.73	.452	314
Have sinus problems	1.84	.375	314
Am careful with my diet	1.83	.386	314
Have been to London	1.94	.252	314
Live alone	1.93	.263	314
Have my driver's license	1.93	.268	314
Like documentaries	1.94	.257	314
Went to a government high school	1.88	.336	314
Have had sex with someone who wasn't my regular partner	1.57	.496	314
Have a brother	1.89	.325	314
Think alcohol should be illegal	1.85	.366	314
Have been tested for HIV	1.66	.480	314
Have gone to the chemist	1.87	.350	314

when sick			
Am at risk for HIV	1.60	.490	314
Support legalising drugs	1.81	.391	314
Think sex is ok in a committed relationship	1.69	.463	314
Live in shared accommodation	1.90	.305	314
Know my HIV status	1.62	.485	314
Often watch television late at night	1.92	.283	314
Have often drunk alcohol	1.81	.399	314
Don't mix with people who drink alcohol	1.89	.325	314
Would consider myself a fan of pop music	1.94	.252	314
Have seen a dentist in the last two years	1.87	.350	314
Smoke cigarettes in social situations	1.85	.372	314
Have more than one sister	1.90	.294	314
Had sex when I was younger than 14	1.61	.490	314
Always use condoms when having sex	1.61	.502	314
Have watched the movie "Tsotsi"	1.91	.281	314
Am entitled to have my partner pay for things for me	1.86	.344	314
Never exercise	1.87	.334	314
Never drink fizzy drinks	1.93	.256	314
Own at least one cell phone	1.91	.285	314
Don't drive when I have been drinking	1.83	.384	314
Have an internet connection at home	1.93	.261	314
Watch the news on TV at least 3 times a week	1.94	.245	314
Reading is a hobby	1.94	.245	314
Think smoking cigarettes is more harmful than	1.86	.351	314

smoking dagga			
Regularly get health check-ups	1.85	.354	314
Don't normally eat breakfast	1.87	.347	314
Know what a "conversion" is in rugby	1.95	.227	314
Have a favourite TV show	1.93	.250	314
Have a dog as a pet	1.95	.227	314
Have my own vehicle	1.92	.276	314
Have seen any kind of health practitioner in the last year	1.89	.315	314
Can speak more than 2 languages reasonably well	1.89	.315	314
Have had diagnostic tests done in the last year	1.86	.344	314
Went to a private high school	1.92	.278	314
Subscribe to electronic newsletters	1.95	.214	314
Have had sex after drinking	1.67	.486	314
Have not had sex	1.71	.461	314
Have had more than two sexual partners in the last three months	1.59	.500	314
Have gone to a local clinic when sick	1.84	.372	314
Have taken antibiotics in the last year	1.86	.344	314
Take vitamins almost everyday	1.86	.344	314
There's a handgun in my house	1.77	.429	314
Only use condoms with a new partner	1.65	.498	314
Have lived outside of South Africa	1.94	.245	314
Am sexually active	1.62	.492	314
Have refused to use a condom	1.58	.508	314

Have never been in hospital	1.85	.363	314
Have watched the movie "Jerusalema"	1.93	.261	314
Had sex the first time with someone when I did not really feel like doing it	1.54	.505	314
Have had sex with someone who isn't a regular partner because I've needed material things (e.g. rent, food, cosmetics).	1.61	.490	314
Have weekend/after hours work for money	1.91	.292	314
Had asthma as a child	1.88	.340	314
Have felt peer pressure to drink alcohol.	1.74	.447	314
Can drive quite well after two drinks	1.88	.333	314
Regularly post items on Facebook	1.93	.250	314
Have been forced to have sex	1.62	.493	314
Have had to slap, kick or bite to stop someone having sex with me	1.61	.490	314
Have engaged in sexual intercourse while under the influence of alcohol that I later regretted.	1.60	.498	314
Regret having had sex	1.55	.511	314
Have lived in at least three different provinces	1.94	.233	314
Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	1.59	.493	314
Don't mix with people who use drugs	1.80	.411	314
Am careful about risky sex	1.61	.507	314
Have a student loan from a	1.82	.394	314

bank			
Have tried to get someone else intoxicated in the hopes of having sexual intercourse with them.	1.62	.493	314
Am comfortable receiving gifts from my sexual partner	1.75	.442	314
Have been sexually active but not had intercourse (vaginal or anal)	1.63	.490	314
Have been coerced or forced to have sexual intercourse by someone who was under the influence of alcohol.	1.61	.496	314
Am a virgin	1.66	.474	314
Sometimes drink alcohol socially	1.83	.384	314
Have been pressurised to have sex without a condom	1.59	.505	314
Have been to Durban	1.92	.276	314
Drink tea	1.92	.276	314
Drink alcohol in moderation	1.89	.325	314
Have forced someone to have sex with me	1.71	.456	314
Have had sexual intercourse when so under the influence of alcohol that I was unable to consent.	1.61	.490	314
Felt ready when I had sex the first time	1.55	.504	314
Own a laptop computer	1.90	.309	314
Have had sex with a teacher or lecturer	1.68	.468	314
Have been in an accident as driver (car/motorcycle/bicycle)	1.86	.348	314
Have blacked out from drinking too much alcohol	1.77	.423	314



Smoke dagga occasionally	1.78	.417	314
Have drunk alcohol	1.82	.381	314
Have allergies	1.84	.372	314
Have a shoe size over 7	1.88	.323	314
Have had sex with someone when I was so drunk that I do not remember it	1.64	.486	314
Often watch television late at night	1.90	.315	314
First had sex between the ages of 14 and 18	1.67	.473	314
Have had sexual intercourse without a condom being used while under the influence of alcohol.	1.61	.501	314
Know the name of the premier of KwaZulu-Natal	1.90	.294	314
Have a cat as a pet	1.95	.234	314
Had the usual childhood illnesses	1.88	.323	314
Live with my family	1.89	.319	314
Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).	1.69	.470	314
Am careful about what I put into my body	1.82	.386	314
Have had sex with someone who was in an authority position in relation to me	1.69	.468	314
Use the internet from my cellphone	1.92	.276	314
Have watched the movie "Argo"	1.95	.214	314
Have consumed alcohol until intoxicated/drunk	1.81	.402	314
Dagga is not harmful	1.83	.372	314
Read the local paper almost everyday	1.93	.268	314

Became aware of sexual feelings from 13 years onwards	1.73	.447	314
Have read the book "Lord of the flies"	1.96	.200	314
Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.	1.71	.463	314
Look after my body	1.84	.386	314

<b>Norming Option - Communalities</b>		
	Initial	Extraction
Have had dental work done	1.000	.779
Know where to buy condoms	1.000	.749
Have more than one sibling	1.000	.763
Have a favourite soccer team	1.000	.756
Would consider myself a sports fan	1.000	.777
Think one alcoholic drink a day is healthy	1.000	.785
Have seen a doctor in the last year	1.000	.735
Have been/ am in a sexual relationship in exchange for things I need (e.g. food, transport, accommodation, fees).	1.000	.801
Visit the Library more than once a week	1.000	.787
Have had sexual intercourse with someone who was too intoxicated to give consent.	1.000	.685

Am on Facebook	1.000	.824
Know where to get condoms for free	1.000	.784
Know what's going on in SA politics	1.000	.725
Know where to get the contraceptive pill	1.000	.765
Often have had sex with my boyfriend/girlfriend because I feel that I have to	1.000	.700
Am comfortable with my sexual desires	1.000	.700
Have broken a limb	1.000	.750
Have raped someone	1.000	.740
Use the internet almost every week	1.000	.765
Have hay fever	1.000	.757
Have an ipad or tablet	1.000	.766
Like reading the editorial section of the local newspaper	1.000	.734
Have a shoe size smaller than size 6	1.000	.783
Work to earn money while I am studying full time	1.000	.764
Always read before going to sleep	1.000	.785
Am HIV positive	1.000	.729
Always have sugar in tea or coffee	1.000	.850
Can type reasonably well	1.000	.829
Have gone to a traditional healer when sick	1.000	.718
Have been slightly drunk	1.000	.781
Am concerned about contracting a sexually transmitted disease	1.000	.712
Exercise regularly	1.000	.809
Have engaged in light petting (kissing, fondling)	1.000	.727
Try to eat healthily	1.000	.774

Have taken illegal drugs	1.000	.744
Know the name of a Maritzburg United soccer player	1.000	.796
Have been aware of sexual feelings between 10 and 12 years	1.000	.721
Have engaged in heavy petting (including genital contact)	1.000	.637
Have used a condom the last time I had sex	1.000	.710
Know about the "morning after" pill	1.000	.706
Have gone to the doctor when sick	1.000	.774
Use the contraceptive pill	1.000	.728
Have had more than one sexual partner in the last month	1.000	.635
Know the name of the Kenyan president	1.000	.774
Have raped someone together with one or more of my friends	1.000	.764
Am waiting for the right partner before having sex	1.000	.750
Won't go in a car with a driver who has been drinking	1.000	.733
Sometimes smoke cigarettes	1.000	.744
Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).	1.000	.745
Regret the first time I had sex	1.000	.716
Have had a wound that needed stitches	1.000	.738
Have experimented casually with various	1.000	.659

drugs		
Have asthma	1.000	.708
Am a vegetarian	1.000	.855
Have one or more pets	1.000	.761
Have had sex with a partner who was 10 or more years older than me at the time	1.000	.734
Don't drink alcohol	1.000	.798
Usually choose sugar free soft drinks	1.000	.796
Have travelled outside South Africa	1.000	.763
Use sms's more than email	1.000	.744
First had sex between the ages of 14 and 16	1.000	.727
Had sex when I was emotionally ready	1.000	.763
Had at least one parent who smoked cigarettes	1.000	.755
Am comfortable with casual sex	1.000	.711
Am waiting till marriage to have sex	1.000	.727
Have been treated for a sexually transmitted infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)	1.000	.760
Drink coffee	1.000	.847
Have been in a car accident as a passenger	1.000	.735
Have taken drugs intravenously (injectable)	1.000	.707
Have sinus problems	1.000	.721
Am careful with my diet	1.000	.753
Have been to London	1.000	.820
Live alone	1.000	.767
Have my driver's license	1.000	.821
Like documentaries	1.000	.696

Went to a government high school	1.000	.764
Have had sex with someone who wasn't my regular partner	1.000	.725
Have a brother	1.000	.832
Think alcohol should be illegal	1.000	.782
Have been tested for HIV	1.000	.764
Have gone to the chemist when sick	1.000	.745
Am at risk for HIV	1.000	.694
Support legalising drugs	1.000	.731
Think sex is ok in a committed relationship	1.000	.796
Live in shared accommodation	1.000	.801
Know my HIV status	1.000	.743
Often watch television late at night	1.000	.821
Have often drunk alcohol	1.000	.772
Don't mix with people who drink alcohol	1.000	.758
Would consider myself a fan of pop music	1.000	.717
Have seen a dentist in the last two years	1.000	.722
Smoke cigarettes in social situations	1.000	.700
Have more than one sister	1.000	.782
Had sex when I was younger than 14	1.000	.721
Always use condoms when having sex	1.000	.751
Have watched the movie "Tsotsi"	1.000	.850
Am entitled to have my partner pay for things for me	1.000	.769
Never exercise	1.000	.736
Never drink fizzy drinks	1.000	.754

Own at least one cell phone	1.000	.837
Don't drive when I have been drinking	1.000	.801
Have an internet connection at home	1.000	.825
Watch the news on TV at least 3 times a week	1.000	.797
Reading is a hobby	1.000	.741
Think smoking cigarettes is more harmful than smoking dagga	1.000	.780
Regularly get health check-ups	1.000	.727
Don't normally eat breakfast	1.000	.743
Know what a "conversion" is in rugby	1.000	.795
Have a favourite TV show	1.000	.812
Have a dog as a pet	1.000	.754
Have my own vehicle	1.000	.787
Have seen any kind of health practitioner in the last year	1.000	.803
Can speak more than 2 languages reasonably well	1.000	.788
Have had diagnostic tests done in the last year	1.000	.797
Went to a private high school	1.000	.811
Subscribe to electronic newsletters	1.000	.769
Have had sex after drinking	1.000	.770
Have not had sex	1.000	.750
Have had more than two sexual partners in the last three months	1.000	.706
Have gone to a local clinic when sick	1.000	.781
Have taken antibiotics in	1.000	.788

the last year		
Take vitamins almost everyday	1.000	.758
There's a handgun in my house	1.000	.726
Only use condoms with a new partner	1.000	.780
Have lived outside of South Africa	1.000	.749
Am sexually active	1.000	.736
Have refused to use a condom	1.000	.729
Have never been in hospital	1.000	.734
Have watched the movie "Jerusalem"	1.000	.800
Had sex the first time with someone when I did not really feel like doing it	1.000	.770
Have had sex with someone who isn't a regular partner because I've needed material things (e.g. rent, food, cosmetics).	1.000	.753
Have weekend/after hours work for money	1.000	.807
Had asthma as a child	1.000	.805
Have felt peer pressure to drink alcohol.	1.000	.737
Can drive quite well after two drinks	1.000	.791
Regularly post items on Facebook	1.000	.757
Have been forced to have sex	1.000	.772
Have had to slap, kick or bite to stop someone having sex with me	1.000	.813
Have engaged in sexual intercourse while under the influence of alcohol	1.000	.764



that I later regretted.		
Regret having had sex	1.000	.767
Have lived in at least three different provinces	1.000	.760
Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	1.000	.750
Don't mix with people who use drugs	1.000	.746
Am careful about risky sex	1.000	.738
Have a student loan from a bank	1.000	.815
Have tried to get someone else intoxicated in the hopes of having sexual intercourse with them.	1.000	.804
Am comfortable receiving gifts from my sexual partner	1.000	.733
Have been sexually active but not had intercourse (vaginal or anal)	1.000	.749
Have been coerced or forced to have sexual intercourse by someone who was under the influence of alcohol.	1.000	.795
Am a virgin	1.000	.809
Sometimes drink alcohol socially	1.000	.770
Have been pressurised to have sex without a condom	1.000	.741
Have been to Durban	1.000	.839
Drink tea	1.000	.863
Drink alcohol in moderation	1.000	.781
Have forced someone to have sex with me	1.000	.785
Have had sexual	1.000	.802

intercourse when so under the influence of alcohol that I was unable to consent.		
Felt ready when I had sex the first time	1.000	.747
Own a laptop computer	1.000	.778
Have had sex with a teacher or lecturer	1.000	.768
Have been in an accident as driver (car/motorcycle/bicycle)	1.000	.734
Have blacked out from drinking too much alcohol	1.000	.685
Smoke dagga occasionally	1.000	.728
Have drunk alcohol	1.000	.718
Have allergies	1.000	.726
Have a shoe size over 7	1.000	.784
Have had sex with someone when I was so drunk that I do not remember it	1.000	.769
Often watch television late at night	1.000	.785
First had sex between the ages of 14 and 18	1.000	.734
Have had sexual intercourse without a condom being used while under the influence of alcohol.	1.000	.737
Know the name of the premier of KwaZulu-Natal	1.000	.755
Have a cat as a pet	1.000	.742
Had the usual childhood illnesses	1.000	.761
Live with my family	1.000	.729
Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).	1.000	.738

Am careful about what I put into my body	1.000	.767
Have had sex with someone who was in an authority position in relation to me	1.000	.817
Use the internet from my cellphone	1.000	.765
Have watched the movie "Argo"	1.000	.826
Have consumed alcohol until intoxicated/drunk	1.000	.747
Dagga is not harmful	1.000	.737
Read the local paper almost everyday	1.000	.808
Became aware of sexual feelings from 13 years onwards	1.000	.761
Have read the book "Lord of the files"	1.000	.782
Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.	1.000	.762
Look after my body	1.000	.732
Extraction Method: Principal Component Analysis.		

<b>Disclosure - Descriptive Statistics</b>			
	Mean	Std. Deviation	Analysis N
Have had dental work done	1.52	.507	315
Know where to buy condoms	1.18	.383	315
Have more than one sibling	1.18	.386	315
Have a favourite soccer team	1.35	.476	315
Would consider myself a sports fan	1.48	.507	315

Think one alcoholic drink a day is healthy	1.61	.489	315
Have seen a doctor in the last year	1.38	.486	315
Have been/ am in a sexual relationship in exchange for things I need (e.g. food, transport, accommodation, fees).	1.86	.344	315
Visit the Library more than once a week	1.41	.492	315
Have had sexual intercourse with someone who was too intoxicated to give consent.	1.82	.391	315
Am on Facebook	1.14	.344	315
Know where to get condoms for free	1.13	.333	315
Know what's going on in SA politics	1.32	.466	315
Know where to get the contraceptive pill	1.22	.420	315
Often have had sex with my boyfriend/girlfriend because I feel that I have to	1.60	.497	315
Am comfortable with my sexual desires	1.29	.452	315
Have broken a limb	1.76	.445	315
Have raped someone	1.95	.226	315
Use the internet almost every week	1.09	.296	315
Have hay fever	1.80	.429	315
Have an ipad or tablet	1.59	.493	315
Like reading the editorial section of the local newspaper	1.57	.502	315
Have a shoe size smaller than size 6	1.58	.495	315
Work to earn money while I am studying full time	1.79	.405	315
Always read before going	1.47	.506	315

to sleep			
Am HIV positive	1.89	.331	315
Always have sugar in tea or coffee	1.16	.372	315
Can type reasonably well	1.16	.366	315
Have gone to a traditional healer when sick	1.69	.464	315
Have been slightly drunk	1.40	.491	315
Am concerned about contracting a sexually transmitted disease	1.26	.441	315
Exercise regularly	1.43	.503	315
Have engaged in light petting (kissing, fondling)	1.17	.383	315
Try to eat healthily	1.18	.396	315
Have taken illegal drugs	1.70	.458	315
Know the name of a Maritzburg United soccer player	1.70	.467	315
Have been aware of sexual feelings between 10 and 12 years	1.59	.493	315
Have engaged in heavy petting (including genital contact)	1.41	.493	315
Have used a condom the last time I had sex	1.42	.501	315
Know about the "morning after" pill	1.22	.437	315
Have gone to the doctor when sick	1.10	.309	315
Use the contraceptive pill	1.77	.441	315
Have had more than one sexual partner in the last month	1.80	.409	315
Know the name of the Kenyan president	1.81	.396	315
Have raped someone together with one or more of my friends	1.95	.226	315
Am waiting for the right partner before having sex	1.66	.482	315

Won't go in a car with a driver who has been drinking	1.44	.498	315
Sometimes smoke cigarettes	1.66	.474	315
Have been in a sexual relationship in exchange for goods (e.g. cell phone, fashionable clothes).	1.91	.285	315
Regret the first time I had sex	1.57	.508	315
Have had a wound that needed stitches	1.74	.447	315
Have experimented casually with various drugs	1.78	.412	315
Have asthma	1.83	.386	315
Am a vegetarian	1.91	.290	315
Have one or more pets	1.81	.391	315
Have had sex with a partner who was 10 or more years older than me at the time	1.85	.369	315
Don't drink alcohol	1.52	.500	315
Usually choose sugar free soft drinks	1.81	.391	315
Have travelled outside South Africa	1.65	.477	315
Use sms's more than email	1.19	.393	315
First had sex between the ages of 14 and 16	1.74	.447	315
Had sex when I was emotionally ready	1.50	.513	315
Had at least one parent who smoked cigarettes	1.59	.505	315
Am comfortable with casual sex	1.66	.487	315
Am waiting till marriage to have sex	1.77	.425	315
Have been treated for a sexually transmitted	1.86	.350	315

infection (e.g. syphilis, gonorrhoea, herpes, genital ulcer, idrop)			
Drink coffee	1.17	.377	315
Have been in a car accident as a passenger	1.73	.446	315
Have taken drugs intravenously (injectable)	1.90	.305	315
Have sinus problems	1.52	.500	315
Am careful with my diet	1.59	.493	315
Have been to London	1.90	.298	315
Live alone	1.72	.451	315
Have my driver's license	1.62	.487	315
Like documentaries	1.47	.500	315
Went to a government high school	1.31	.464	315
Have had sex with someone who wasn't my regular partner	1.57	.502	315
Have a brother	1.21	.410	315
Think alcohol should be illegal	1.57	.496	315
Have been tested for HIV	1.17	.380	315
Have gone to the chemist when sick	1.20	.401	315
Am at risk for HIV	1.70	.457	315
Support legalising drugs	1.82	.386	315
Think sex is ok in a committed relationship	1.16	.369	315
Live in shared accommodation	1.57	.497	315
Know my HIV status	1.16	.369	315
Often watch television late at night	1.45	.505	315
Have often drunk alcohol	1.56	.498	315
Don't mix with people who drink alcohol	1.81	.404	315
Would consider myself a fan of pop music	1.64	.481	315
Have seen a dentist in the last two years	1.68	.469	315

Smoke cigarettes in social situations	1.73	.460	315
Have more than one sister	1.37	.484	315
Had sex when I was younger than 14	1.88	.339	315
Always use condoms when having sex	1.56	.510	315
Have watched the movie "Tsotsi"	1.26	.438	315
Am entitled to have my partner pay for things for me	1.79	.405	315
Never exercise	1.79	.405	315
Never drink fizzy drinks	1.86	.344	315
Own at least one cell phone	1.15	.354	315
Don't drive when I have been drinking	1.48	.507	315
Have an internet connection at home	1.60	.491	315
Watch the news on TV at least 3 times a week	1.51	.501	315
Reading is a hobby	1.55	.499	315
Think smoking cigarettes is more harmful than smoking dagga	1.53	.500	315
Regularly get health check-ups	1.72	.449	315
Don't normally eat breakfast	1.57	.496	315
Know what a "conversion" is in rugby	1.61	.489	315
Have a favourite TV show	1.23	.421	315
Have a dog as a pet	1.78	.414	315
Have my own vehicle	1.87	.350	315
Have seen any kind of health practitioner in the last year	1.56	.497	315
Can speak more than 2 languages reasonably well	1.29	.452	315
Have had diagnostic tests	1.70	.457	315



done in the last year			
Went to a private high school	1.67	.471	315
Subscribe to electronic newsletters	1.58	.501	315
Have had sex after drinking	1.63	.490	315
Have not had sex	1.76	.430	315
Have had more than two sexual partners in the last three months	1.80	.406	315
Have gone to a local clinic when sick	1.29	.454	315
Have taken antibiotics in the last year	1.40	.491	315
Take vitamins almost everyday	1.75	.436	315
There's a handgun in my house	1.84	.369	315
Only use condoms with a new partner	1.78	.439	315
Have lived outside of South Africa	1.90	.307	315
Am sexually active	1.34	.473	315
Have refused to use a condom	1.77	.430	315
Have never been in hospital	1.71	.461	315
Have watched the movie "Jerusalem"	1.37	.483	315
Had sex the first time with someone when I did not really feel like doing it	1.72	.455	315
Have had sex with someone who isn't a regular partner because I've needed material things (e.g. rent, food, cosmetics).	1.90	.309	315
Have weekend/after hours work for money	1.81	.404	315
Had asthma as a child	1.84	.377	315

Have felt peer pressure to drink alcohol.	1.60	.491	315
Can drive quite well after two drinks	1.87	.337	315
Regularly post items on Facebook	1.50	.501	315
Have been forced to have sex	1.84	.366	315
Have had to slap, kick or bite to stop someone having sex with me	1.82	.388	315
Have engaged in sexual intercourse while under the influence of alcohol that I later regretted.	1.82	.388	315
Regret having had sex	1.63	.489	315
Have lived in at least three different provinces	1.83	.377	315
Have had unprotected sex while knowing I am HIV positive and/or have a sexually transmitted infection	1.90	.315	315
Don't mix with people who use drugs	1.65	.491	315
Am careful about risky sex	1.23	.445	315
Have a student loan from a bank	1.80	.403	315
Have tried to get someone else intoxicated in the hopes of having sexual intercourse with them.	1.87	.343	315
Am comfortable receiving gifts from my sexual partner	1.48	.513	315
Have been sexually active but not had intercourse (vaginal or anal)	1.78	.431	315
Have been coerced or forced to have sexual intercourse by someone who was under the	1.86	.353	315

influence of alcohol.			
Am a virgin	1.75	.434	315
Sometimes drink alcohol socially	1.50	.513	315
Have been pressurised to have sex without a condom	1.73	.459	315
Have been to Durban	1.05	.226	315
Drink tea	1.10	.307	315
Drink alcohol in moderation	1.54	.512	315
Have forced someone to have sex with me	1.94	.251	315
Have had sexual intercourse when so under the influence of alcohol that I was unable to consent.	1.85	.357	315
Felt ready when I had sex the first time	1.55	.504	315
Own a laptop computer	1.24	.429	315
Have had sex with a teacher or lecturer	1.94	.238	315
Have been in an accident as driver (car/motorcycle/bicycle)	1.86	.350	315
Have blacked out from drinking too much alcohol	1.73	.446	315
Smoke dagga occasionally	1.78	.414	315
Have drunk alcohol	1.38	.486	315
Have allergies	1.44	.503	315
Have a shoe size over 7	1.67	.472	315
Have had sex with someone when I was so drunk that I do not remember it	1.85	.366	315
Often watch television late at night	1.47	.506	315
First had sex between the ages of 14 and 18	1.59	.499	315
Have had sexual	1.77	.441	315

intercourse without a condom being used while under the influence of alcohol.			
Know the name of the premier of KwaZulu-Natal	1.31	.471	315
Have a cat as a pet	1.84	.380	315
Had the usual childhood illnesses	1.38	.494	315
Live with my family	1.38	.493	315
Have been/am in a sexual relationship mainly for material benefits (e.g. gifts, food, clothes).	1.89	.311	315
Am careful about what I put into my body	1.29	.452	315
Have had sex with someone who was in an authority position in relation to me	1.90	.294	315
Use the internet from my cellphone	1.12	.326	315
Have watched the movie "Argo"	1.75	.436	315
Have consumed alcohol until intoxicated/drunk	1.63	.485	315
Dagga is not harmful	1.81	.396	315
Read the local paper almost everyday	1.75	.443	315
Became aware of sexual feelings from 13 years onwards	1.42	.494	315
Have read the book "Lord of the files"	1.76	.427	315
Have coerced or forced someone who was under the influence of alcohol to have sexual intercourse with me.	1.92	.293	315
Look after my body	1.24	.441	315

<b>Social Desirability - Item Statistics</b>			
	Mean	Std. Deviation	N
I sometimes feel resentful when I don't get my way.	1.41	.493	314
On a few occasions, I have given up doing something because I thought too little of my ability.	1.42	.494	314
There have been times when I felt like rebelling against people in authority even though I knew they were right.	1.50	.501	314
No matter who I'm talking to, I'm always a good listener.	1.22	.415	314
I can remember "playing sick" to get out of something.	1.31	.461	314
There have been occasions when I took advantage of someone.	1.58	.495	314
I'm always willing to admit it when I make a mistake.	1.40	.490	314
I sometimes try to get even rather than forgive and forget.	1.45	.499	314
I am always courteous (polite), even to people who are disagreeable (unpleasant).	1.34	.475	314
I have never been irked (irritated) when people expressed ideas very different from my own.	1.46	.500	314
There have times when I was quite jealous of the good fortune of others.	1.57	.496	314
I am sometimes irritated by people who ask	1.56	.497	314

favours of me.			
I have never deliberately said something that hurt someone's feelings.	1.37	.483	314

<b>Social Desirability Descriptive Statistics</b>			
	Mean	Std. Deviation	Analysis N
I sometimes feel resentful when I don't get my way.	1.41	.493	314
On a few occasions, I have given up doing something because I thought too little of my ability.	1.42	.494	314
There have been times when I felt like rebelling against people in authority even though I knew they were right.	1.50	.501	314
No matter who I'm talking to, I'm always a good listener.	1.22	.415	314
I can remember "playing sick" to get out of something.	1.31	.461	314
There have been occasions when I took advantage of someone.	1.58	.495	314
I'm always willing to admit it when I make a mistake.	1.40	.490	314
I sometimes try to get even rather than forgive and forget.	1.45	.499	314
I am always courteous (polite), even to people who are disagreeable (unpleasant).	1.34	.475	314
I have never been irked (irritated) when people expressed ideas very	1.46	.500	314

different from my own.			
There have times when I was quite jealous of the good fortune of others.	1.57	.496	314
I am sometimes irritated by people who ask favours of me.	1.56	.497	314
I have never deliberately said something that hurt someone's feelings.	1.37	.483	314

Social Desirability - Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
18.59	5.176	2.275	13

Social Desirability - Intraclass Correlation Coefficient							
	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.058 <sup>a</sup>	.040	.080	1.797	313	3756	.000
Average Measures	.444	.349	.530	1.797	313	3756	.000

Two-way random effects model where both people effects and measures effects are random.

a. The estimator is the same, whether the interaction effect is present or not.

b. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

Social Desirability - Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I sometimes feel resentful when I don't get my way.	17.18	4.292	.314	.317	.376
On a few occasions, I have given up doing something because I	17.17	4.237	.342	.304	.367

thought too little of my ability.					
There have been times when I felt like rebelling against people in authority even though I knew they were right.	17.09	4.462	.219	.155	.405
No matter who I'm talking to, I'm always a good listener.	17.37	4.833	.094	.066	.440
I can remember "playing sick" to get out of something.	17.28	4.662	.151	.084	.426
There have been occasions when I took advantage of someone.	17.01	4.342	.286	.175	.384
I'm always willing to admit it when I make a mistake.	17.19	4.441	.240	.148	.399
I sometimes try to get even rather than forgive and forget.	17.13	4.500	.202	.060	.410
I am always courteous (polite), even to people who are disagreeable (unpleasant).	17.25	4.748	.098	.139	.440
I have never been irked (irritated) when people expressed ideas very different from my own.	17.12	5.033	-.048	.083	.482
There have times when I was quite jealous of the good fortune of others.	17.02	4.489	.210	.134	.408
I am sometimes irritated by people who ask favours of me.	17.02	4.559	.175	.123	.418
I have never deliberately said something that hurt someone's feelings.	17.22	5.399	-.203	.158	.520